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ACIDIC PRECIPITATION IN ONTARIO STUDY

1983 DAILY PRECIPITATION CHEMISTRY LISTINGS

ATMOSPHERIC PROCESSES STUDIES UNIT
AIR QUALITY AND METEOROLOGY SECTION
AIR RESOURCES BRANCH
880 BAY STREET,
TORONTO, ONTARIO
CANADA M5S 1Z8

FEBRUARY, 1985

ARB-043-85-AQM
API-004-85

A.P.I.O.S. COORDINATION OFFICE
ONTARIO MINISTRY OF THE ENVIRONMENT
6th FLOOR, 40 ST. CLAIR AVE. W.,
TORONTO, ONTARIO
CANADA, M4V 1P5
PROJECT COORDINATOR: DR. T.G. BRYDGES

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ACKNOWLEDGEMENTS

This report was prepared by David Chung of the APIOS Atmospheric Deposition and Chemistry Program. However, the data themselves are a product of the combined efforts of many individuals. Precipitation samples were collected by a large number of site operators, whose names cannot be individually mentioned here, under the coordination of the APIOS environmental technicians Steve Elliott (in Southwestern Region), Dave Allcock (in Southeastern Region), Wim Smits (in Northwestern Region) and J.P. Varto (in Central Region). Sample handling was carried out by Dan Orr and Scott Kennedy, and overall network coordination by Bill Bardswick of the Air Resource Branch. Chemical Analyses were performed at the Laboratory Services and Applied Research Branch under the coordination of Frank Tomassini. All equiries regarding the reported data should be directed to Walter Chan, Coordinator, Atmospheric Deposition and Chemistry Program, at (416) 965-1634.

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PART I

INTRODUCTION

INTRODUCTION

The data listed herein are a summary of the 1983 results acquired from the APIOS daily precipitation sampling network. All data presented in this report have been screened for validity. Remarks and qualifications have been appended to records, and/or results where necessary. The screening procedure involved checking each record for chemical analysis integrity (e.g., ionic balance, observed vs. theoretical conductance). Gross limit checks were applied to the results. Upper limit were determined as M + 2S where median (M) and scale (S) represent robust estimates of mean and standard deviation respectively. Scale of the distributon was determined from interquartile distance, i.e. S=0.74 (3rd quartile - 1st quartile) based upon logarithmically transformed results. In a situation where the distribution is significantly bounded by reported detection limits, S may be estimated as follows, S=1.48 (3rd quartile - 2nd quartile). All lower gross limits were specified as zero. The data were also screened for outliers statistically by applying the Dixon Ratio test to the highest and lowest values observed in each region on a daily basis. Outliers were determined at the 95% level of confidence. Records and/or results deemed unreliable were flagged but not deleted. Detailed description of the validation procedures as applied to this data set is available from the Ministry upon request.

Station Identification

The station identification is defined by four descriptive fields (e.g. Dorset/Daily/Aerochem #08). The first field refers to the sampling location. The second and third fields describe the sampling interval and the instrumentation used respectively. The last numeric field refers to the index code utilized on the location map.

Daily Precipitation Chemistry Listings

Sample type, as coded in the data listings, represents the best guess of the type of event which was sampled. All chemical analyses were done on unfiltered samples. Lab pH entries represent pH measurements at the main MOE Laboratory in Toronto while field pH entries represent measurements at regional laboratories. Remark codes (e.g., U,A) appended to individual results are defined in a later section. The tabulated results for "Free H"

were calculated from the reported Lab pH. Total hydrogen results, reported as "Total H", represent a titration of the sample with NaOH to an end point pH of 8.3.

Calculation of Equivalent Precipitation Depth (mm)

$$\text{Equivalent Precipitation Depth (mm)} = \frac{\text{Volume Collected (ml)} \times 15.6}{1000}$$

Calculation of Observed Sampling Efficiency

$$\% \text{ Efficiency} = \frac{\text{Equivalent Precipitation Depth (mm)} \times 100\ \%}{\text{Gauge Depth (mm)}}$$

If the sample collection efficiency is less than 50% or greater than 120%, and if any of the field comment codes which affect sample collection efficiency (i.e. "F", "G", "H", "I", "J", "L", "P", and "M") is appended to the sample record, then the sample collection efficiency is flagged as unreliable.

Field Comment Code Index

A - Insects in sample
B - Leaves in sample
C - Particulates in sample
D - Fibres in sample
E - Sample not submitted
F - Sampler malfunctioned
G - Sample spilled or leaked
H - Volume incorrect
I - Event(s) missed
J - Wet side open when not precipitating
K - No precipitation collected
L - Part of event missed
M - Dry side open when precipitating
P - Gauge depth incorrect
Q - Other

Office Comment Code Index

C - Poor calculated vs. observed conductance comparison

J - ΔpH Large

H - Poor calculated vs. observed pH comparison

M - Poor ionic balance

N - Abnormal sample collection efficiency

T - Free H^+ exceeds total H^+

Y - Collected sample remained in sampler in excess of 24 hours with event(s) only occurred in the first 24 hours

Y2 - Sampling period euqals to two days

Y3 - Sampling period equals to three days

Y4 - Sampling period equals to four days

Y5 - Sampling period equals to five days

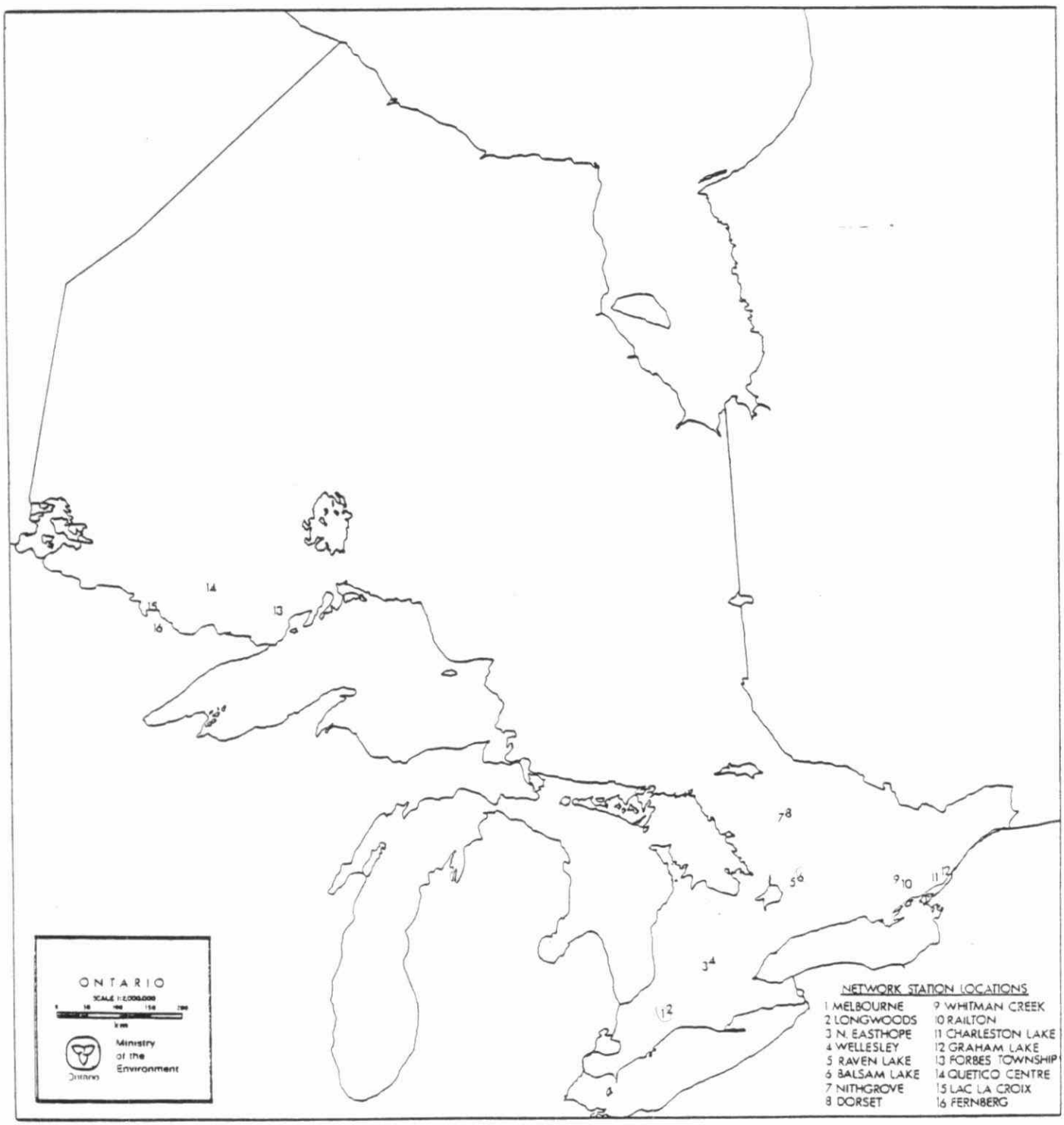
Z - Non-standard collection period with one or more events collected after 24 hours

Result Remark Code Index

>	-	actual results greater than value reported
<	-	actual result less than value reported
T	-	actual result less than criterion of detection
W	-	no response, minimum possible results reported
A	-	approximate value
U	-	unreliable result
G	-	exceedance of Gross Limit Checks
D	-	outlier of Dixon Ratio Test
B	-	exceedance of Gross Limit Checks and Outlier of Dixon Ratio Tests

PART II

STATION DESCRIPTION AND LOCATION MAP


ONTARIO
Ministry of the Environment
NETWORK STATION LOCATIONS
1 MELBOURNE
2 LONGWOODS
3 N. EASTHOPE
4 WELLESLEY
5 RAVEN LAKE
6 BALSAM LAKE
7 NITHGROVE
8 DORSET
9 WHITMAN CREEK
10 RAILTON
11 CHARLESTON LAKE
12 GRAHAM LAKE
13 FORBES TOWNSHIP
14 QUETICO CENTRE
15 LAC LA CROIX
16 FERNBERG

APIOS DAILY PRECIPITATION AND AIR MONITORING NETWORK SITE LOCATIONS *

AREA	MOE REGION	STATION NAME	ELEVATION (m above MSL)	LATITUDE (North)	LONGITUDE (West)	UTM COORDINATES (Northing)	(Easting)
London	Southwestern	Longwoods Conservations Area*	239	42°53'02"	81°28'50"	4747600	460700
		Melbourne	213	42°47'15"	81°33'23"	4737100	454500
		North Easthope	375	43°24'21"	80°53'35"	4805650	508650
		Wellesley	344	43°28'13"	80°45'35"	4812700	519600
Dorset	Central	Dorset Laboratory*	320	45°13'23"	78°55'49"	5009600	662450
		Nithgrove	325	45°12'01"	79°04'14"	5006800	651600
		Balsam Lake Provincial Park	259	44°37'35"	78°51'22"	4943500	670170
		Raven Lake	274	44°36'40"	78°54'43"	4941550	665700
Kingston	Southeastern	Charleston Lake Provincial Park*	92	44°29'54"	76°02'30"	4927500	417150
		Graham Lake	130	44°35'22"	75°51'44"	4937450	431550
		Railton	156	44°22'34"	76°35'33"	4914700	373200
		Whitman Creek	137	44°29'07"	76°49'19"	4927200	355100
Thunder Bay	Northwestern	Fernberg*	506	47°56'51"	91°29'26"	5311000	612000
		Lac La Croix	368	48°21'14"	92°12'32"	5355900	558400
		Forbes Township	324	48°34'58"	89°38'56"	5384150	304800
		Quetico Centre	420	48°24'44"	91°12'08"	5399750	632100

* All sites monitor precipitation concentrations. Sites labelled (*) also monitor air concentrations.

PART III

SOUTHWESTERN REGION

DAILY PRECIPITATION CHEMISTRY LISTINGS

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LONGWOODS/DAILY/AEROCHEM #02 PAGE : 1

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES		SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
JAN 7,83	JAN 6,83	800	900	****	****	1	1.5	2	17492	2	1		100	CD	
JAN 11,83	JAN 10,83	600	815	1600	1900	1	17.3	2	17495	2	1		101		
JAN 12,83	JAN 11,83	815	900	****	****	3	4.7	2	17498	2	1		55	C	
JAN 13,83	JAN 12,83	900	900	900	1800	2	1.1	2	17501	2	1		****	EFK	
JAN 15,83	JAN 14,83	800	900	1800	2300	3	6.3	2	17504	2	1		44	CD	NH
JAN 17,83	JAN 16,83	800	900	****	****	2	0.7	2	17510	2	1		****	EK	
JAN 19,83	JAN 17,83	900	1000	1200	600	2	3.7	2	17513	2	1		****	EK	Y2
JAN 23,83	JAN 22,83	800	900	****	****	1	1.7	2	17516	2	1	U	11	CL	N
JAN 24,83	JAN 23,83	900	900	900	1900	3	0.7	2	17519	2	1	U	64	CLD	
JAN 25,83	JAN 24,83	900	1000	****	****	3	1.8	2	17522	2	1	U	38	CL	N
JAN 31,83	JAN 30,83	800	900	800	1200	3	3.5	2	17525	2	1		116	C	
FEB 2,83	FEB 1,83	800	1230	****	****	1	8.7	2	17528	2	1		73		
FEB 3,83	FEB 2,83	1230	1000	1230	730	1	2.9	2	17531	2	1		112	C	
FEB 4,83	FEB 3,83	1000	1000	1300	1000	2	2.7	2	17534	2	1		****	EKI	
FEB 5,83	FEB 4,83	1000	900	1000	1600	2	2.1	2	17537	2	1		****	EIK	
FEB 7,83	FEB 6,83	800	900	1800	900	2	6.5	2	17540	2	1		****	EIK	
FEB 8,83	FEB 7,83	900	1000	900	1500	2	0.7	2	17543	2	1		****	EIK	
FEB 17,83	FEB 16,83	800	900	2100	900	3	1.3	2	17546	2	1		96	CD	
FEB 19,83	FEB 18,83	800	1000	400	600	2	0.3	2	17549	2	1		****	EIK	
FEB 22,83	FEB 21,83	800	800	500	630	1	****	2	17552	2	1		****	C	
FEB 23,83	FEB 22,83	800	900	1500	100	1	10.1	2	17555	2	1		102	C	
FEB 24,83	FEB 23,83	900	1000	****	****	1	0.5	2	17558	2	1		****	EIK	
MAR 7,83	MAR 6,83	800	900	2200	530	1	1.1	2	17561	2	1		153	C	N
MAR 8,83	MAR 7,83	900	1030	1900	430	1	1.5	2	17564	2	1		140	C	N
MAR 9,83	MAR 8,83	1030	900	1500	2200	1	2.5	2	17567	2	1		117	C	
MAR 10,83	MAR 9,83	900	930	400	730	1	0.5	2	17570	2	1		37		N
MAR 19,83	MAR 18,83	800	800	1900	800	1	4.3	2	17573	2	1		69	C	
MAR 20,83	MAR 19,83	800	800	800	1200	3	8.1	2	17576	2	1		85	C	HM
MAR 21,83	MAR 20,83	800	1030	2100	1030	3	6.3	2	17579	2	1		****	EFIK	
MAR 22,83	MAR 21,83	1030	1000	1030	1000	2	4.3	2	17582	2	1		****	EFIK	
MAR 23,83	MAR 22,83	1000	1030	1030	900	2	0.7	2	17585	2	1		****	EFIK	
MAR 27,83	MAR 26,83	800	900	****	****	3	6.8	2	17588	2	1		36		N
APR 3,83	APR 2,83	800	900	1500	2300	1	3.6	2	17594	2	1		122	C	N
APR 4,83	APR 3,83	900	900	****	****	1	1.3	2	17597	2	1		108	D	
APR 7,83	APR 6,83	800	900	1000	830	1	10.9	2	17600	2	1		95	C	
APR 10,83	APR 9,83	800	800	1900	100	1	29.7	2	17603	2	1		100		
APR 11,83	APR 10,83	800	900	****	****	1	1.1	2	17606	2	1		93	C	
APR 14,83	APR 13,83	800	900	2300	900	1	10.6	1	17609	2	1		101	CD	
APR 15,83	APR 14,83	900	900	900	1700	1	11.2	1	17612	2	1		100	C	
APR 17,83	APR 16,83	800	800	****	****	2	2.2	2	17615	2	1		****	EFIK	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LONGWOODS/DAILY/AEROCHEM #02

REMOVAL DATE	EXPOSURE DATE	VOLUME ML		CONDUCT. UMHO/CM		PH FIELD		PH LAB		TOTAL H+ TO PH8.3 MG/L		SULPHATE MG/L		NITRATE AS N MG/L	
JAN 7,83	JAN 6,83	97.0		******		******		4.14		0.1088		4.05		1.88	
JAN 11,83	JAN 10,83	1122.0		24.5		4.31		4.29		0.0760		2.30		0.29	
JAN 12,83	JAN 11,83	168.0		21.7		******		4.50		0.0574		2.40		0.50	
JAN 13,83	JAN 12,83	******		******		******		******		******		******		******	
JAN 15,83	JAN 14,83	178.0	U	91.5		3.81	U	3.87		0.1852		5.20	U	2.20	
JAN 17,83	JAN 16,83	******		******		******		******		******		******		******	
JAN 19,83	JAN 17,83	******		******		******		******		******		******		******	
JAN 23,83	JAN 22,83	13.0		******		******		******		******		******		******	
JAN 24,83	JAN 23,83	29.0		******		******		3.86	G	0.2100		******		******	
JAN 25,83	JAN 24,83	44.0		******		******	U	3.98		0.1946	U	11.45		2.10	
JAN 31,83	JAN 30,83	262.0		37.3		4.10		4.06		0.1162		3.40		0.56	
FEB 2,83	FEB 1,83	408.0		26.6		4.25		4.26		0.0826		2.50		0.31	
FEB 3,83	FEB 2,83	210.0		57.0		3.92		3.89		0.1644		3.50		1.08	
FEB 4,83	FEB 3,83	******		******		******		******		******		******		******	
FEB 5,83	FEB 4,83	******		******		******		******		******		******		******	
FEB 7,83	FEB 6,83	******		******		******		******		******		******		******	
FEB 8,83	FEB 7,83	******		******		******		******		******		******		******	
FEB 17,83	FEB 16,83	80.0		******		******	U	3.48	G	0.3520		8.00	U	3.50	
FEB 19,83	FEB 18,83	******		******		******		******		******		******		******	
FEB 22,83	FEB 21,83	10.0		******		******		******		******		******		******	
FEB 23,83	FEB 22,83	666.0	U	101.8		3.62		3.64	G	0.2698		8.05		1.40	
FEB 24,83	FEB 23,83	******		******		******		******		******		******		******	
MAR 7,83	MAR 6,83	108.0		******		******	D	4.73		0.0388		2.40		0.38	
MAR 8,83	MAR 7,83	135.0		38.2		******		4.31		0.0784		4.30		1.19	
MAR 9,83	MAR 8,83	188.0		60.0		3.98		3.90		0.1456		4.25		1.21	
MAR 10,83	MAR 9,83	12.0		******		******		******		******		******		******	
MAR 19,83	MAR 18,83	191.0		17.6		******		4.99		0.0354		2.25		0.47	
MAR 20,83	MAR 19,83	443.0	D	15.6		******		4.61		0.0472		1.65		0.21	
MAR 21,83	MAR 20,83	******		******		******		******		******		******		******	
MAR 22,83	MAR 21,83	******		******		******		******		******		******		******	
MAR 23,83	MAR 22,83	******		******		******		******		******		******		******	
MAR 27,83	MAR 26,83	161.0		21.7		******		4.51		0.1572		2.10		0.32	
APR 3,83	APR 2,83	283.0		35.9		4.25		4.29		0.0798		4.80		0.71	
APR 4,83	APR 3,83	90.0		******		******		4.13		0.1052		3.25		0.61	
APR 7,83	APR 6,83	665.0		55.8		4.03		4.01	G	0.2720		4.50		0.89	
APR 10,83	APR 9,83	1905.0		22.1	D	4.44		4.42		0.0584		1.80		0.30	
APR 11,83	APR 10,83	66.0		******		******		******		******		4.15		0.94	
APR 14,83	APR 13,83	689.0		43.1		4.03		4.15		0.1012		3.70		0.57	
APR 15,83	APR 14,83	725.0		27.3		4.35		4.37		0.0654		2.95		0.31	
APR 17,83	APR 16,83	******		******		******		******		******		******		******	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LONGWOODS/DAILY/AEROCHEM #02 PAGE : 3

REMOVAL DATE	EXPOSURE DATE		CALCIUM MG/L		CHLORIDE MG/L		MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L		FREE H+ LAB MG/L
JAN 7,83	JAN 6,83	U	2.02		0.48	U	0.320	0.090	0.125	0.750		0.0724
JAN 11,83	JAN 10,83		0.11		0.13		0.020	0.035	0.015	0.168		0.0513
JAN 12,83	JAN 11,83		0.28		0.48		0.060	0.080	0.075	0.720		0.0316
JAN 13,83	JAN 12,83		******		******		******	******	******	******		******
JAN 15,83	JAN 14,83	U	1.97		1.00	U	0.430	0.080	0.515	1.010	U	0.1349
JAN 17,83	JAN 16,83		******		******		******	******	******	******		******
JAN 19,83	JAN 17,83		******		******		******	******	******	******		******
JAN 23,83	JAN 22,83		******		******		******	******	******	******		******
JAN 24,83	JAN 23,83		******		******		******	******	******	******		0.1380
JAN 25,83	JAN 24,83		******	U	1.24		******	******	******	******	U	0.1047
JAN 31,83	JAN 30,83		0.15		0.18		0.040	0.040	0.035	0.420		0.0871
FEB 2,83	FEB 1,83		0.08		0.12		0.030	0.020	0.055	0.256		0.0550
FEB 3,83	FEB 2,83		0.32		0.59		0.090	0.095	0.135	0.228		0.1288
FEB 4,83	FEB 3,83		******		******		******	******	******	******		******
FEB 5,83	FEB 4,83		******		******		******	******	******	******		******
FEB 7,83	FEB 6,83		******		******		******	******	******	******		******
FEB 8,83	FEB 7,83		******		******		******	******	******	******		******
FEB 17,83	FEB 16,83		******	U	1.30		******	******	******	******	U	0.3311
FEB 19,83	FEB 18,83		******		******		******	******	******	******		******
FEB 22,83	FEB 21,83		******		******		******	******	******	******		******
FEB 23,83	FEB 22,83		0.27		0.64		0.055	0.050	0.205	0.730		0.2291
FEB 24,83	FEB 23,83		******		******		******	******	******	******		******
MAR 7,83	MAR 6,83	D	1.03		0.36		0.150	0.100	0.185	******	D	0.0186
MAR 8,83	MAR 7,83	U	1.68		0.53		0.200	0.115	0.260	******		0.0490
MAR 9,83	MAR 8,83		0.32		0.28		0.050	0.035	0.070	0.690		0.1259
MAR 10,83	MAR 9,83		******		******		******	******	******	******		******
MAR 19,83	MAR 18,83	D	0.81		0.38		0.160	0.120	0.215	0.148		0.0102
MAR 20,83	MAR 19,83	D	0.29		0.80		0.045	0.040	0.030	0.120		0.0245
MAR 21,83	MAR 20,83		******		******		******	******	******	******		******
MAR 22,83	MAR 21,83		******		******		******	******	******	******		******
MAR 23,83	MAR 22,83		******		******		******	******	******	******		******
MAR 27,83	MAR 26,83		0.43		0.26		0.070	0.160	0.170	0.230		0.0309
APR 3,83	APR 2,83		1.22		0.32	U	0.260	0.110	0.140	0.264		0.0513
APR 4,83	APR 3,83		0.03		0.18		0.040	0.050	0.060	******		0.0741
APR 7,83	APR 6,83		0.35		0.21		0.040	0.050	0.050	0.380		0.0977
APR 10,83	APR 9,83		0.14		0.06		0.020	0.030	0.030	0.086		0.0380
APR 11,83	APR 10,83		0.46		0.35		0.080	0.210	0.310	******		******
APR 14,83	APR 13,83		0.34		0.20		0.030	0.085	0.035	0.228		0.0708
APR 15,83	APR 14,83		0.32		0.17		0.050	0.040	0.060	0.214		0.0427
APR 17,83	APR 16,83		******		******		******	******	******	******		******

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LONGWOODS/DAILY/AEROCHEM #02

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES		SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
APR 18,83	APR 17,83	800	800	****	****	3	4.6	2	17618	2	1		38	D	N
APR 29,83	APR 28,83	745	800	810	1400	1	13.0	2	17621	2	1		101	C	JH
MAY 1,83	APR 30,83	800	900	830	1600	1	18.6	1	17624	2	1		104	AC	
MAY 2,83	MAY 1,83	900	900	1430	100	1	21.8	1	17627	2	1		99	C	
MAY 3,83	MAY 2,83	900	900	1400	1630	1	25.6	1	17630	2	1		98	C	
MAY 4,83	MAY 3,83	900	900	1030	2300	1	7.4	1	17633	2	1		98	C	
MAY 5,83	MAY 4,83	900	1030	1830	1930	1	2.0	1	17636	2	1		86	C	H
MAY 8,83	MAY 7,83	800	900	1800	2400	1	13.0	1	17639	2	1		94	D	
MAY 15,83	MAY 14,83	800	1000	****	****	1	5.9	1	17642	2	1		90	CD	
MAY 20,83	MAY 19,83	800	1100	920	2230	1	30.6	1	17645	2	1		119	BC	HM
MAY 23,83	MAY 22,83	800	900	830	1030	1	9.2	1	17648	2	1		98		
MAY 24,83	MAY 23,83	900	1030	****	****	1	1.4	1	17651	2	1		86	C	
MAY 26,83	MAY 25,83	800	930	1000	1730	1	4.8	1	17654	2	1	U	78	G	
MAY 30,83	MAY 29,83	800	930	1000	1200	1	15.2	1	17657	2	1		104		
JUN 1,83	MAY 31,83	800	930	1130	2200	1	10.0	1	17660	2	1		99	C	H
JUN 4,83	JUN 3,83	800	900	1600	2400	1	14.0	1	17663	2	1		96		
JUN 6,83	JUN 5,83	800	1000	2300	1000	1	8.6	1	17666	2	1		98		
JUN 7,83	JUN 6,83	1000	900	1000	1200	1	1.2	1	17669	2	1		26	C	N
JUN 10,83	JUN 9,83	800	800	500	630	1	2.4	1	17673	2	1		94	CD	
JUN 28,83	JUN 27,83	800	1000	1500	1000	1	20.0	1	17676	2	1	U	91	ACG	
JUN 29,83	JUN 28,83	1000	1000	****	****	1	1.4	1	17679	2	1		63	C	
JUL 1,83	JUN 30,83	800	1600	1700	1830	1	3.0	1	17682	2	1		84		M
JUL 5,83	JUL 4,83	800	1030	1500	1630	1	18.7	1	17685	2	1		102		
JUL 18,83	JUL 17,83	800	930	1330	1800	1	10.4	1	17688	2	1		101	C	J
JUL 26,83	JUL 20,83	800	1300	1500	1800	1	6.0	1	17691	2	1		97	CD	Y6
JUL 30,83	JUL 29,83	800	1200	1000	300	1	25.0	1	17694	2	1		141		N
JUL 31,83	JUL 30,83	1200	1100	2300	100	1	9.3	1	17697	2	1		105	C	
AUG 1,83	JUL 31,83	1100	1130	115	230	1	25.0	1	17700	2	1		105		
AUG 4,83	AUG 3,83	800	800	****	****	1	21.4	1	17703	2	1		100		
AUG 9,83	AUG 8,83	800	800	1800	2200	1	19.4	1	17706	2	1		94	AC	
AUG 11,83	AUG 10,83	800	1130	530	1130	1	43.6	1	17709	2	1		100	C	
AUG 12,83	AUG 11,83	1130	1200	1130	1400	1	1.1	1	17712	2	1		66		
AUG 22,83	AUG 21,83	800	800	400	500	1	2.0	1	17722	2	1		74	C	
SEP 2,83	AUG 30,83	800	800	****	****	1	19.2	1	17725	2	1		92		Y3
SEP 7,83	SEP 6,83	800	830	830	2100	1	3.0	1	17720	2	1		71	C	
SEP 12,83	SEP 11,83	800	900	****	****	1	1.7	1	17718	2	1		14		N
SEP 16,83	SEP 15,83	800	800	600	800	1	11.2	1	17734	2	1		100		
SEP 17,83	SEP 16,83	800	900	800	1700	1	15.2	1	17732	2	1		97		T
SEP 19,83	SEP 18,83	800	800	200	500	1	3.0	1	17717	2	1		75		
SEP 21,83	SEP 20,83	800	800	2400	500	1	30.2	1	17730	2	1		22	C	N

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LONGWOODS/DAILY/AEROCHEM #02

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM		PH FIELD		PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L		NITRATE AS N MG/L
APR 18,83	APR 17,83	114.0	******		******		4.41	0.0752	1.65		0.70
APR 29,83	APR 28,83	848.0	16.6		4.69	G	5.53	0.0238	3.00		0.34
MAY 1,83	APR 30,83	1247.0	21.4		4.21		4.45	0.0618	2.05		0.33
MAY 2,83	MAY 1,83	1395.0	24.5		4.19		4.41	0.0628	2.35		0.22
MAY 3,83	MAY 2,83	1613.0	20.9		4.43		4.67	0.0440	2.65		0.36
MAY 4,83	MAY 3,83	468.0	27.5		4.13		4.27	0.0768	3.00		0.18
MAY 5,83	MAY 4,83	111.0	******		******	G	5.53	0.0330	4.80		1.44
MAY 8,83	MAY 7,83	786.0	16.8		4.44	D	4.86	0.0390	2.70		0.20
MAY 15,83	MAY 14,83	341.0	12.8		4.58		5.08	0.0292	1.95		0.21
MAY 20,83	MAY 19,83	2348.0	22.1		4.18		4.44	0.0644	2.45		0.14
MAY 23,83	MAY 22,83	581.0	33.8		4.07		4.26	0.0908	3.15		0.35
MAY 24,83	MAY 23,83	78.0	******		******		******	******	3.55		0.56
MAY 26,83	MAY 25,83	242.0	40.4		3.97		4.17	0.1022	3.70		0.46
MAY 30,83	MAY 29,83	1023.0	39.4		4.01		4.14	0.1066	3.40		0.36
JUN 1,83	MAY 31,83	635.0	19.4		4.47		4.68	0.0478	2.45		0.41
JUN 4,83	JUN 3,83	869.0	53.8		3.82		3.98	0.1368	4.50		0.64
JUN 6,83	JUN 5,83	541.0	9.9		4.59		5.01	0.0304	1.10		0.18
JUN 7,83	JUN 6,83	20.0	******		******	G	6.34	0.0178	******		******
JUN 10,83	JUN 9,83	146.0	******		******		4.17	0.1066	5.80		0.93
JUN 28,83	JUN 27,83	1179.0	67.0		3.94		4.09	0.1328	9.25		0.85
JUN 29,83	JUN 28,83	57.0	******		******	U	7.06	0.0138	0.75		0.07
JUL 1,83	JUN 30,83	162.0	******		******		3.88	0.2120	8.05		0.88
JUL 5,83	JUL 4,83	1233.0	13.2		4.48		4.83	0.0386	1.55		0.16
JUL 18,83	JUL 17,83	674.0	19.5	U	5.75	U	6.78	0.0206	3.50		0.63
JUL 26,83	JUL 20,83	376.0	20.0		4.79		4.88	0.0392	3.20		0.69
JUL 30,83	JUL 29,83	2260.0	35.5		4.13		4.22	0.0842	3.75		0.48
JUL 31,83	JUL 30,83	631.0	47.3		3.96	U	4.13	0.1044	5.10	D	0.64
AUG 1,83	JUL 31,83	1693.0	D 29.0		4.25		4.35	0.0668	3.55	D	0.33
AUG 4,83	AUG 3,83	1381.0	34.5		4.08		4.21	0.0844	3.45		0.38
AUG 9,83	AUG 8,83	1177.0	19.5		4.41		4.79	0.0394	3.00		0.35
AUG 11,83	AUG 10,83	2812.0	33.3	D	4.07		4.25	0.0820	3.80		0.30
AUG 12,83	AUG 11,83	47.0	******		******		3.99	0.1834	9.10		0.78
AUG 22,83	AUG 21,83	96.0	******		******		4.05	0.1244	6.10		0.95
SEP 2,83	AUG 30,83	1144.0	24.6		3.95		4.35	0.0652	3.75		0.44
SEP 7,83	SEP 6,83	137.0	D 64.0		******		4.06	0.1288	7.20		0.70
SEP 12,83	SEP 11,83	16.0	******		******	U	7.30	0.0200	******		******
SEP 16,83	SEP 15,83	720.0	44.7		3.70		4.10	0.0886	2.90		0.70
SEP 17,83	SEP 16,83	952.0	38.6		3.79		4.20	0.0610	3.95		0.35
SEP 19,83	SEP 18,83	146.0	36.5		******		4.34	0.0758	3.70		0.53
SEP 21,83	SEP 20,83	440.0	10.2		******		4.77	0.0320	0.90		0.10

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LONGWOODS/DAILY/AEROCHEM #02

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
APR 18,83	APR 17,83	0.29	0.18	0.050	0.045	0.035	0.326	0.0389
APR 29,83	APR 28,83	0.84	0.27	0.170	0.125	0.165	0.540	G 0.0030
MAY 1,83	APR 30,83	0.15	0.08	0.035	0.035	0.045	0.292	0.0355
MAY 2,83	MAY 1,83	0.10	0.04	0.030	0.030	0.045	0.260	0.0389
MAY 3,83	MAY 2,83	0.49	0.20	0.085	0.070	0.190	0.460	0.0214
MAY 4,83	MAY 3,83	0.20	0.10	0.025	0.045	0.045	0.140	0.0537
MAY 5,83	MAY 4,83	1.52	0.29	0.310	0.115	0.110	1.490	G 0.0030
MAY 8,83	MAY 7,83	0.59	0.15	0.100	0.055	0.140	0.248	D 0.0138
MAY 15,83	MAY 14,83	0.40	0.16	0.070	0.060	0.050	0.260	0.0083
MAY 20,83	MAY 19,83	U 0.82	0.06	0.025	0.030	0.010	0.174	0.0363
MAY 23,83	MAY 22,83	0.11	0.17	0.020	0.055	0.050	0.322	0.0550
MAY 24,83	MAY 23,83	0.75	0.28	0.155	0.090	0.110	0.470	******
MAY 26,83	MAY 25,83	0.25	0.18	0.050	0.060	0.060	0.420	0.0676
MAY 30,83	MAY 29,83	0.10	0.11	0.030	0.030	0.025	0.310	0.0724
JUN 1,83	MAY 31,83	0.41	0.12	0.080	0.060	0.025	0.620	0.0209
JUN 4,83	JUN 3,83	0.19	0.17	0.045	0.020	0.035	0.226	0.1047
JUN 6,83	JUN 5,83	0.12	0.05	0.030	0.020	0.025	0.250	0.0098
JUN 7,83	JUN 6,83	******	******	******	******	******	******	G 0.0005
JUN 10,83	JUN 9,83	0.85	0.30	0.185	0.055	0.090	0.730	0.0676
JUN 28,83	JUN 27,83	0.79	0.27	0.135	0.100	0.130	1.540	0.0813
JUN 29,83	JUN 28,83	******	0.26	******	******	******	******	U 0.0001
JUL 1,83	JUN 30,83	0.43	0.31	0.075	0.035	0.065	0.370	0.1318
JUL 5,83	JUL 4,83	0.20	0.12	0.040	0.015	0.060	0.150	0.0148
JUL 18,83	JUL 17,83	U 1.45	0.22	0.280	0.060	0.060	0.730	U 0.0002
JUL 26,83	JUL 20,83	1.11	0.26	0.170	0.050	0.065	0.590	0.0132
JUL 30,83	JUL 29,83	0.40	0.15	0.065	0.035	0.065	0.332	0.0603
JUL 31,83	JUL 30,83	U 0.39	U 0.39	0.080	U 0.315	U 0.265	0.530	U 0.0741
AUG 1,83	JUL 31,83	0.15	D 0.09	0.045	0.040	0.030	0.580	0.0447
AUG 4,83	AUG 3,83	0.20	0.11	0.040	0.035	0.035	0.330	0.0617
AUG 9,83	AUG 8,83	0.57	0.15	0.115	0.055	0.025	0.530	0.0162
AUG 11,83	AUG 10,83	0.15	0.11	0.030	0.030	0.030	0.440	0.0562
AUG 12,83	AUG 11,83	******	0.35	******	******	******	******	0.1023
AUG 22,83	AUG 21,83	1.11	0.20	0.160	0.050	0.065	0.292	0.0891
SEP 2,83	AUG 30,83	0.34	0.10	0.055	0.020	0.025	0.620	0.0447
SEP 7,83	SEP 6,83	D 0.74	0.22	D 0.105	0.055	0.160	0.590	0.0871
SEP 12,83	SEP 11,83	******	******	******	******	******	******	U 0.0001
SEP 16,83	SEP 15,83	0.28	0.20	0.030	0.030	0.020	0.156	0.0794
SEP 17,83	SEP 16,83	0.15	0.09	0.015	0.065	0.040	0.490	0.0631
SEP 19,83	SEP 18,83	0.54	0.12	0.060	0.055	0.065	0.334	0.0457
SEP 21,83	SEP 20,83	0.09	0.03	0.005	<W 0.005	<W 0.005	0.086	0.0170

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LONGWOODS/DAILY/AEROCHEM #02 PAGE : 7

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
SEP 26,83	SEP 25,83	800	800	2030	2230	1	1.2	1	17728	2	1	31	C	N
OCT 4,83	OCT 3,83	800	830	2000	2030	1	1.0	1	17750	2	1	26	C	N
OCT 5,83	OCT 4,83	830	1030	800	1030	1	4.2	1	17748	2	1	99	C	
OCT 6,83	OCT 5,83	1030	1000	1000	1500	1	1.6	1	17746	2	1	53	C	
OCT 9,83	OCT 8,83	830	900	1000	1500	1	8.2	1	17744	2	1	101		
OCT 12,83	OCT 11,83	800	900	400	900	1	8.2	1	17742	2	1	91	C	
OCT 13,83	OCT 12,83	1000	1000	1000	1500	1	3.2	1	17740	2	1	69	C	
OCT 14,83	OCT 13,83	1000	900	1330	1900	1	5.6	1	17738	2	1	81	C	
OCT 17,83	OCT 16,83	800	800	1700	2000	1	1.2	1	17736	2	1	61	C	
OCT 23,83	OCT 22,83	800	900	1300	500	1	20.8	1	17752	2	1	94		J
OCT 24,83	OCT 23,83	900	830	1000	500	1	0.8	1	17754	2	1	19		N
OCT 26,83	OCT 25,83	800	1200	1400	2200	1	1.4	1	17756	2	1	46	C	N
OCT 27,83	OCT 26,83	1200	930	1600	1700	1	0.8	1	17758	2	1	54	C	
OCT 31,83	OCT 30,83	800	830	****	****	1	1.8	1	17760	2	1	111	C	HCM
NOV 2,83	NOV 1,83	900	900	1830	2000	1	4.2	1	17762	2	1	99	C	JHM
NOV 3,83	NOV 2,83	900	1100	1130	2000	1	6.4	1	17764	2	1	91	C	JM
NOV 11,83	NOV 10,83	800	900	****	****	1	17.1	1	17767	2	1	99		J
NOV 12,83	NOV 11,83	900	900	900	1300	3	6.2	1	17769	2	1	55	C	JHM
NOV 16,83	NOV 15,83	800	900	1800	2330	3	****	1	17771	2	1	****	C	J
NOV 17,83	NOV 16,83	900	900	****	****	1	5.4	1	17774	2	1	62		J
NOV 20,83	NOV 19,83	800	900	****	****	1	****	1	17776	2	1	****		J
NOV 21,83	NOV 20,83	900	1000	****	****	1	7.2	2	17778	2	1	22	CD	N
NOV 23,83	NOV 22,83	900	900	****	****	1	4.8	2	17780	2	1	112		J
NOV 28,83	NOV 27,83	800	900	1830	900	1	9.4	2	17784	2	1	71	C	JM
NOV 29,83	NOV 28,83	900	1115	****	****	3	13.0	2	17786	2	1	96	C	J
NOV 30,83	NOV 29,83	1115	900	1100	900	2	0.6	2	17789	2	1	26	CD	N
DEC 4,83	DEC 3,83	900	900	400	900	4	1.0	2	17791	2	1	168	C	NHM
DEC 5,83	DEC 4,83	900	1130	2000	1130	3	0.8	2	17793	2	1	136	C	N
DEC 6,83	DEC 5,83	1130	900	1130	900	3	27.0	2	17795	2	1	69		
DEC 7,83	DEC 6,83	900	1100	900	2000	3	25.8	2	17799	2	1	101		
DEC 9,83	DEC 8,83	800	800	1700	800	2	2.8	2	17801	2	1	****	EIK	
DEC 10,83	DEC 9,83	800	900	****	****	2	1.2	2	17803	2	1	67		
DEC 12,83	DEC 11,83	1000	900	1400	900	1	14.8	2	17805	2	1	94		
DEC 13,83	DEC 12,83	900	900	****	****	1	0.2	2	17807	2	1	249	CD	N
DEC 15,83	DEC 14,83	900	800	****	****	1	****	2	17811	2	1	****		
DEC 19,83	DEC 18,83	900	900	****	****	2	0.6	2	17813	2	1	****	EIK	
DEC 22,83	DEC 21,83	900	900	1030	530	3	22.0	2	17815	2	1	73		

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LONGWOODS/DAILY/AEROCHEM #02

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
SEP 26,83	SEP 25,83	24.0	******	******	4.27	0.0572	7.70	0.89
OCT 4,83	OCT 3,83	17.0	******	******	U 7.39	0.0158	******	******
OCT 5,83	OCT 4,83	268.0	21.8	4.15	4.48	0.0560	2.75	0.50
OCT 6,83	OCT 5,83	55.0	******	******	4.56	0.0500	1.50	0.35
OCT 9,83	OCT 8,83	534.0	18.6	4.22	4.68	0.0448	3.20	0.35
OCT 12,83	OCT 11,83	479.0	12.8	4.34	4.76	0.0406	1.20	0.21
OCT 13,83	OCT 12,83	142.0	D 37.0	******	4.16	0.1038	D 3.45	D 0.46
OCT 14,83	OCT 13,83	294.0	26.5	3.98	4.34	0.0742	2.80	0.32
OCT 17,83	OCT 16,83	47.0	******	******	4.01	0.1568	8.65	D 0.85
OCT 23,83	OCT 22,83	1264.0	18.1	U 3.34	4.34	0.0578	1.85	0.28
OCT 24,83	OCT 23,83	10.0	******	******	******	******	******	******
OCT 26,83	OCT 25,83	42.0	41.5	******	4.25	0.0934	******	******
OCT 27,83	OCT 26,83	28.0	******	******	U 7.19	0.0180	******	******
OCT 31,83	OCT 30,83	129.0	5.5	******	U 7.26	0.0140	0.65	0.05
NOV 2,83	NOV 1,83	268.0	27.2	3.62	4.45	0.0722	2.70	0.56
NOV 3,83	NOV 2,83	374.0	38.0	3.69	4.19	0.1002	3.30	0.63
NOV 11,83	NOV 10,83	1089.0	18.5	3.80	4.52	0.0484	1.90	0.25
NOV 12,83	NOV 11,83	222.0	5.0	U 5.31	U 7.53	0.0142	0.65	<T 0.02
NOV 16,83	NOV 15,83	423.0	19.6	U 2.54	4.39	0.0610	0.90	0.60
NOV 17,83	NOV 16,83	216.0	22.5	3.56	4.37	0.0646	1.95	0.42
NOV 20,83	NOV 19,83	422.0	37.1	U 3.29	4.16	0.0976	3.50	0.70
NOV 21,83	NOV 20,83	103.0	D 38.2	******	4.25	0.0752	4.35	0.45
NOV 23,83	NOV 22,83	346.0	42.4	U 3.23	4.10	0.1094	4.45	0.44
NOV 28,83	NOV 27,83	430.0	13.5	U 3.18	4.64	0.0408	1.30	0.18
NOV 29,83	NOV 28,83	802.0	26.8	U 2.98	4.31	0.0726	2.60	0.36
NOV 30,83	NOV 29,83	10.0	******	******	******	******	******	******
DEC 4,83	DEC 3,83	108.0	9.6	******	U 7.60	0.0106	2.15	0.20
DEC 5,83	DEC 4,83	70.0	******	******	4.38	0.0776	6.95	1.46
DEC 6,83	DEC 5,83	1198.0	16.0	4.42	4.54	0.0464	1.55	0.19
DEC 7,83	DEC 6,83	1686.0	21.9	******	4.35	0.0638	2.35	0.16
DEC 9,83	DEC 8,83	******	******	******	******	******	******	******
DEC 10,83	DEC 9,83	52.0	******	******	4.78	0.0366	1.55	0.36
DEC 12,83	DEC 11,83	900.0	27.5	******	4.27	0.0762	2.25	0.49
DEC 13,83	DEC 12,83	32.0	******	******	4.04	0.1324	******	******
DEC 15,83	DEC 14,83	79.0	******	******	4.03	0.1212	5.15	0.98
DEC 19,83	DEC 18,83	******	******	******	******	******	******	******
DEC 22,83	DEC 21,83	1032.0	26.3	******	4.30	0.0710	2.60	0.37

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LONGWOODS/DAILY/AEROCHEM #02 PAGE : 9

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
SEP 26,83	SEP 25,83	******	0.26	******	******	******	******	0.0537
OCT 4,83	OCT 3,83	******	******	******	******	******	******	U 0.0000
OCT 5,83	OCT 4,83	0.42	0.07	0.055	0.045	0.015	0.540	0.0331
OCT 6,83	OCT 5,83	******	0.05	******	******	******	******	0.0275
OCT 9,83	OCT 8,83	0.71	0.06	0.055	0.060	<T 0.010	0.460	0.0209
OCT 12,83	OCT 11,83	D 0.17	0.07	D 0.030	0.025	0.025	0.114	0.0174
OCT 13,83	OCT 12,83	0.20	D 0.38	0.030	0.025	0.045	0.222	0.0692
OCT 14,83	OCT 13,83	0.27	0.26	0.050	0.050	0.020	0.278	0.0457
OCT 17,83	OCT 16,83	******	0.35	******	******	******	******	0.0977
OCT 23,83	OCT 22,83	0.08	0.09	0.020	0.035	0.065	0.108	0.0457
OCT 24,83	OCT 23,83	******	******	******	******	******	******	******
OCT 26,83	OCT 25,83	******	******	******	******	******	******	0.0562
OCT 27,83	OCT 26,83	******	******	******	******	******	******	U 0.0001
OCT 31,83	OCT 30,83	0.24	0.13	0.040	0.065	0.040	0.112	U 0.0001
NOV 2,83	NOV 1,83	0.32	0.17	0.045	0.075	0.070	0.154	0.0355
NOV 3,83	NOV 2,83	0.17	0.32	0.040	0.035	0.170	0.170	0.0646
NOV 11,83	NOV 10,83	0.12	0.13	D 0.015	0.030	<T 0.005	0.194	0.0302
NOV 12,83	NOV 11,83	0.52	0.08	0.110	0.035	0.040	0.068	U 0.0000
NOV 16,83	NOV 15,83	0.12	0.07	0.010	0.035	0.015	0.104	0.0407
NOV 17,83	NOV 16,83	0.12	0.08	0.015	0.030	0.025	0.162	0.0427
NOV 20,83	NOV 19,83	0.31	0.30	0.035	0.070	0.150	0.318	0.0692
NOV 21,83	NOV 20,83	0.41	0.47	0.090	0.085	******	0.284	0.0562
NOV 23,83	NOV 22,83	0.25	0.40	0.030	0.040	0.205	0.258	0.0794
NOV 28,83	NOV 27,83	0.12	0.12	0.015	<T 0.010	<T 0.010	0.058	0.0229
NOV 29,83	NOV 28,83	0.11	0.19	0.020	0.020	0.020	0.258	0.0490
NOV 30,83	NOV 29,83	******	******	******	******	******	******	******
DEC 4,83	DEC 3,83	U 1.12	0.14	U 0.215	0.035	0.050	0.026	U 0.0000
DEC 5,83	DEC 4,83	******	0.91	******	******	******	******	0.0417
DEC 6,83	DEC 5,83	0.11	0.05	0.015	<T 0.010	0.015	0.048	0.0288
DEC 7,83	DEC 6,83	0.05	0.05	0.010	<T 0.005	0.015	0.078	0.0447
DEC 9,83	DEC 8,83	******	******	******	******	******	******	******
DEC 10,83	DEC 9,83	******	0.31	******	******	******	******	0.0166
DEC 12,83	DEC 11,83	0.12	0.11	0.015	<T 0.015	0.040	0.116	0.0537
DEC 13,83	DEC 12,83	******	******	******	******	******	******	0.0912
DEC 15,83	DEC 14,83	******	0.39	******	******	******	0.520	0.0933
DEC 19,83	DEC 18,83	******	******	******	******	******	******	******
DEC 22,83	DEC 21,83	0.17	0.09	0.035	<T 0.015	0.070	0.108	0.0501

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : MELBOURNE/DAILY/AEROCHEM #01 PAGE : 1

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
JAN 7,83	JAN 6,83	800	800	****	****	1	1.7	2	18186	2	1	130	CD	N
JAN 10,83	JAN 9,83	800	800	****	****	1	15.5	2	18187	2	1	93		
JAN 12,83	JAN 11,83	800	800	****	****	3	2.4	2	18188	2	1	81		
JAN 15,83	JAN 14,83	800	800	****	****	2	4.8	2	18189	2	1	****	EFIK	
JAN 18,83	JAN 17,83	800	800	****	****	2	****	2	18190	2	1	****		
JAN 19,83	JAN 18,83	800	800	****	****	2	2.6	2	18191	2	1	****	EK	
JAN 23,83	JAN 22,83	800	900	****	****	1	2.1	2	18192	2	1	95		
JAN 25,83	JAN 24,83	800	800	****	****	1	1.0	2	18193	2	1	59		
JAN 31,83	JAN 30,83	800	800	****	****	3	4.3	2	18194	2	1	105		
FEB 2,83	FEB 1,83	800	800	****	****	1	3.7	2	18195	2	1	75	C	
FEB 3,83	FEB 2,83	800	800	****	****	2	5.5	2	18196	2	1	115		
FEB 17,83	FEB 16,83	800	800	****	****	1	1.0	2	18197	2	1	118	C	
FEB 23,83	FEB 22,83	800	800	****	****	1	6.2	2	18198	2	1	126		N
MAR 7,83	MAR 6,83	800	800	****	****	1	1.7	2	18199	2	1	146	C	N
MAR 8,83	MAR 7,83	800	800	****	****	1	2.3	2	18200	2	1	114	C	
MAR 9,83	MAR 8,83	800	800	****	****	1	3.6	2	18201	2	1	114	CD	
MAR 19,83	MAR 18,83	800	800	****	****	1	16.6	2	18202	2	1	85		
MAR 27,83	MAR 26,83	800	930	****	****	3	6.7	2	18203	2	1	66		
APR 3,83	APR 2,83	800	1000	****	****	1	2.6	2	18204	2	1	150	C	N
APR 5,83	APR 3,83	1000	1445	****	****	1	****	2	18205	2	1	****	A	Y2
APR 7,83	APR 6,83	800	800	****	****	1	11.1	2	18206	2	1	88	C	
APR 8,83	APR 7,83	800	800	****	****	1	****	2	18207	2	1	****	C	
APR 10,83	APR 9,83	800	800	****	****	1	36.1	2	18208	2	1	99	C	
APR 11,83	APR 10,83	800	800	****	****	1	1.1	2	18209	2	1	58	C	
APR 12,83	APR 11,83	800	800	****	****	1	1.2	2	18210	2	1	132	CD	N
APR 14,83	APR 13,83	800	800	****	****	1	9.6	1	18211	2	1	99	C	
APR 15,83	APR 14,83	800	800	****	****	1	14.4	1	18212	2	1	93	C	
APR 17,83	APR 16,83	800	1000	****	****	2	4.6	2	18213	2	1	U 18	HL	N
APR 18,83	APR 17,83	1000	800	****	****	2	1.8	2	18214	2	1	****	EFIK	
APR 29,83	APR 28,83	800	800	****	****	1	13.2	1	18215	2	1	93		H
MAY 1,83	APR 30,83	800	900	900	1600	1	17.2	1	18216	2	1	98		
MAY 2,83	MAY 1,83	900	800	****	****	1	22.3	1	18217	2	1	92		
MAY 3,83	MAY 2,83	800	800	****	****	1	****	1	18218	2	1	****	C	
MAY 4,83	MAY 3,83	800	800	****	****	1	7.5	1	18219	2	1	99		
MAY 5,83	MAY 4,83	800	800	****	****	1	1.9	1	18220	2	1	86	C	
MAY 8,83	MAY 7,83	800	800	****	****	1	12.2	1	18221	2	1	103	C	
MAY 15,83	MAY 14,83	800	800	****	****	1	12.0	1	18222	2	1	97		
MAY 20,83	MAY 19,83	800	800	****	****	1	22.0	1	18223	2	1	138		N
MAY 22,83	MAY 21,83	800	800	****	****	1	1.0	1	18224	2	1	81	C	
MAY 23,83	MAY 22,83	800	800	****	****	1	11.4	1	18225	2	1	89	C	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : MELBOURNE/DAILY/AEROCHEM #01

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
JAN 7,83	JAN 6,83	142.0	58.5	******	4.04	0.1258	5.25	2.05
JAN 10,83	JAN 9,83	925.0	30.0	4.27	******	******	2.15	0.28
JAN 12,83	JAN 11,83	126.0	******	******	4.37	0.0820	3.00	0.73
JAN 15,83	JAN 14,83	******	******	******	******	******	******	******
JAN 18,83	JAN 17,83	203.0	G 106.0	3.65	3.74	G 0.2400	7.40	1.77
JAN 19,83	JAN 18,83	******	******	******	******	******	******	******
JAN 23,83	JAN 22,83	128.0	48.0	******	4.21	0.1466	4.05	0.84
JAN 25,83	JAN 24,83	38.0	******	******	3.65	G 0.3080	******	******
JAN 31,83	JAN 30,83	292.0	42.3	4.07	4.06	0.1286	4.00	0.67
FEB 2,83	FEB 1,83	179.0	30.4	4.44	4.29	0.0942	4.15	0.40
FEB 3,83	FEB 2,83	407.0	43.7	4.09	4.02	0.1336	3.35	0.70
FEB 17,83	FEB 16,83	76.0	******	******	U 3.37	G 0.5580	U 11.85	U 5.40
FEB 23,83	FEB 22,83	502.0	G 110.0	******	3.61	G 0.2920	8.50	1.53
MAR 7,83	MAR 6,83	160.0	30.0	******	4.26	0.0664	2.70	0.38
MAR 8,83	MAR 7,83	169.0	46.6	******	4.23	0.0916	5.25	1.37
MAR 9,83	MAR 8,83	265.0	55.8	******	4.02	0.1406	4.20	1.12
MAR 19,83	MAR 18,83	908.0	24.4	******	4.35	D 0.0700	1.80	0.38
MAR 27,83	MAR 26,83	285.0	26.8	******	4.31	0.0732	1.95	0.40
APR 3,83	APR 2,83	251.0	52.1	4.26	4.22	0.1008	6.85	1.11
APR 5,83	APR 3,83	75.0	******	******	4.10	0.1114	3.05	0.71
APR 7,83	APR 6,83	630.0	60.3	4.09	3.95	0.1414	5.05	0.98
APR 8,83	APR 7,83	11.0	******	******	******	******	******	******
APR 10,83	APR 9,83	2296.0	A 20.0	4.71	4.44	0.0572	1.70	0.27
APR 11,83	APR 10,83	41.0	******	******	G 5.29	******	5.25	1.03
APR 12,83	APR 11,83	102.0	******	******	4.16	0.1104	5.55	0.82
APR 14,83	APR 13,83	615.0	50.2	4.09	4.08	0.1264	4.25	0.71
APR 15,83	APR 14,83	865.0	28.6	4.41	4.39	0.0724	2.80	0.34
APR 17,83	APR 16,83	54.0	******	******	******	******	1.50	1.45
APR 18,83	APR 17,83	******	******	******	******	******	******	******
APR 29,83	APR 28,83	789.0	23.0	4.60	4.97	0.0386	4.20	0.50
MAY 1,83	APR 30,83	1081.0	26.0	4.25	4.36	0.0690	2.25	0.34
MAY 2,83	MAY 1,83	1321.0	25.4	4.23	4.40	0.0648	2.65	0.24
MAY 3,83	MAY 2,83	616.0	20.4	D 4.55	4.85	0.0384	3.00	0.35
MAY 4,83	MAY 3,83	479.0	29.9	4.17	4.25	0.0798	3.45	0.19
MAY 5,83	MAY 4,83	105.0	******	******	U 4.90	0.0498	5.25	2.10
MAY 8,83	MAY 7,83	806.0	23.4	4.41	4.70	0.0448	4.00	0.39
MAY 15,83	MAY 14,83	753.0	13.3	4.65	4.79	0.1272	1.45	0.11
MAY 20,83	MAY 19,83	1947.0	28.6	4.17	4.33	0.0768	2.85	0.14
MAY 22,83	MAY 21,83	52.0	******	******	U 3.44	G 0.4960	U 12.30	U 2.45
MAY 23,83	MAY 22,83	655.0	32.9	4.13	4.27	0.0828	3.30	0.29

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : MELBOURNE/DAILY/AEROCHEM #01

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
JAN 7,83	JAN 6,83	1.04	0.57	0.130	0.075	0.305	U 1.420	0.0912
JAN 10,83	JAN 9,83	G 1.52	0.13	0.225	0.125	0.110	0.206	******
JAN 12,83	JAN 11,83	0.06	0.48	0.005	0.045	<W 0.005	0.940	0.0427
JAN 15,83	JAN 14,83	******	******	******	******	******	******	******
JAN 18,83	JAN 17,83	0.92	G 1.05	0.115	0.095	0.370	G 1.230	0.1820
JAN 19,83	JAN 18,83	******	******	******	******	******	******	******
JAN 23,83	JAN 22,83	0.59	0.51	0.060	G 0.300	0.280	0.228	0.0617
JAN 25,83	JAN 24,83	******	******	******	******	******	******	0.2239
JAN 31,83	JAN 30,83	0.14	0.24	0.035	0.065	0.065	0.690	0.0871
FEB 2,83	FEB 1,83	0.21	0.27	0.050	0.180	0.145	******	0.0513
FEB 3,83	FEB 2,83	0.17	0.36	0.045	0.060	0.095	0.276	0.0955
FEB 17,83	FEB 16,83	******	U 2.30	******	******	******	******	U 0.4266
FEB 23,83	FEB 22,83	0.31	0.79	0.055	0.060	0.240	0.730	0.2455
MAR 7,83	MAR 6,83	0.60	0.53	0.090	0.075	0.255	0.072	0.0550
MAR 8,83	MAR 7,83	U 1.90	0.69	0.220	U 0.365	0.330	0.750	0.0589
MAR 9,83	MAR 8,83	0.42	0.30	0.050	0.080	0.120	0.520	0.0955
MAR 19,83	MAR 18,83	0.09	0.07	0.015	0.015	0.025	0.162	0.0447
MAR 27,83	MAR 26,83	0.13	0.11	0.025	0.040	0.065	0.198	0.0490
APR 3,83	APR 2,83	U 1.69	0.45	U 0.320	0.140	0.160	0.630	0.0603
APR 5,83	APR 3,83	0.12	0.14	0.020	0.050	0.050	******	0.0794
APR 7,83	APR 6,83	0.47	0.26	0.050	0.070	0.080	0.430	0.1122
APR 8,83	APR 7,83	******	******	******	******	******	******	******
APR 10,83	APR 9,83	0.14	0.06	0.010	0.040	0.030	0.072	0.0363
APR 11,83	APR 10,83	******	0.35	******	******	******	******	G 0.0051
APR 12,83	APR 11,83	0.39	0.98	0.060	U 0.505	U 0.660	0.810	0.0692
APR 14,83	APR 13,83	0.36	0.22	0.040	0.070	0.045	0.248	0.0832
APR 15,83	APR 14,83	0.31	0.20	0.045	0.060	0.080	0.194	0.0407
APR 17,83	APR 16,83	0.25	0.34	0.035	0.055	0.040	******	******
APR 18,83	APR 17,83	******	******	******	******	******	******	******
APR 29,83	APR 28,83	1.00	0.16	0.195	0.080	0.105	0.780	0.0107
MAY 1,83	APR 30,83	0.07	0.06	0.025	0.015	0.030	0.284	0.0437
MAY 2,83	MAY 1,83	0.12	0.05	0.030	0.040	0.060	0.272	0.0398
MAY 3,83	MAY 2,83	0.63	0.22	0.110	D 0.085	0.210	0.460	0.0141
MAY 4,83	MAY 3,83	0.25	0.15	0.035	0.080	0.150	0.152	0.0562
MAY 5,83	MAY 4,83	U 1.95	0.44	U 0.405	0.195	0.175	1.600	U 0.0126
MAY 8,83	MAY 7,83	0.98	0.27	0.150	0.110	0.240	0.440	0.0200
MAY 15,83	MAY 14,83	D 0.16	0.05	0.035	0.020	0.035	0.214	0.0162
MAY 20,83	MAY 19,83	0.10	0.06	0.020	0.025	0.030	0.184	0.0468
MAY 22,83	MAY 21,83	******	U 1.28	******	******	******	******	U 0.3631
MAY 23,83	MAY 22,83	0.14	0.11	0.030	0.040	0.050	0.304	0.0537

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : MELBOURNE/DAILY/AEROCHEM #01

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
MAY 24,83	MAY 23,83	800	800	****	****	1	0.6	1	18226	2	1	****	E	
MAY 26,83	MAY 25,83	800	800	****	****	1	4.5	1	18227	2	1	90	ACD	
MAY 30,83	MAY 29,83	800	800	1000	1500	1	14.8	1	18228	2	1	103	C	
JUN 1,83	MAY 31,83	800	800	****	****	1	10.4	1	18229	2	1	100	AD	
JUN 4,83	JUN 3,83	800	800	****	****	1	11.2	1	18230	2	1	95		
JUN 6,83	JUN 5,83	800	800	****	****	1	6.0	1	18231	2	1	103	CD	
JUN 7,83	JUN 6,83	800	800	****	****	1	3.6	1	18232	2	1	82		H
JUN 10,83	JUN 9,83	800	800	****	****	1	3.0	1	18233	2	1	94	D	HM
JUN 28,83	JUN 27,83	800	900	****	****	1	22.2	1	18235	2	1	142	C	N
JUN 29,83	JUN 28,83	900	800	****	****	1	1.6	1	18236	2	1	48		N
JUL 1,83	JUN 30,83	800	800	****	****	1	3.4	1	18237	2	1	92	D	
JUL 5,83	JUL 4,83	800	900	****	****	1	22.0	1	18238	2	1	U 124	DF	
JUL 18,83	JUL 17,83	800	900	1300	1900	1	37.4	1	18239	2	1	91	C	
JUL 20,83	JUL 19,83	800	800	****	****	1	0.6	1	18240	2	1	36		N
JUL 21,83	JUL 20,83	800	800	****	****	1	5.0	1	18241	2	1	91	BC	J
JUL 24,83	JUL 23,83	800	800	****	****	1	1.2	1	18242	2	1	70		
JUL 29,83	JUL 28,83	800	1200	400	1200	1	33.0	1	18243	2	1	103	C	
JUL 30,83	JUL 29,83	1200	900	****	****	1	14.8	1	18244	2	1	98	C	
JUL 31,83	JUL 30,83	900	1300	****	****	1	21.5	1	18245	2	1	98		
AUG 1,83	JUL 31,83	1300	800	****	****	1	5.8	1	18246	2	1	91	BC	
AUG 2,83	AUG 1,83	800	800	****	****	1	0.6	1	18247	2	1	20	E	N
AUG 4,83	AUG 3,83	800	800	****	****	1	22.2	1	18248	2	1	U 186	P	N
AUG 9,83	AUG 8,83	800	800	****	****	3	20.0	1	18249	2	1	102	BC	J
AUG 11,83	AUG 10,83	800	800	****	****	1	12.0	1	18250	2	1	96		
AUG 16,83	AUG 11,83	800	800	1100	1400	1	21.3	1	18251	2	1	116		Y5
AUG 22,83	AUG 21,83	800	800	1200	1600	1	2.6	1	18255	2	1	80		
AUG 23,83	AUG 22,83	800	800	****	****	1	0.4	1	18254	2	1	****	E	
AUG 26,83	AUG 25,83	800	800	****	****	1	0.6	1	18253	2	1	****	E	
AUG 31,83	AUG 30,83	800	800	****	****	1	29.0	1	18256	2	1	102		J
SEP 7,83	SEP 6,83	800	800	****	****	1	1.7	1	18252	2	1	45		N
SEP 16,83	SEP 15,83	800	800	****	****	1	11.2	1	18261	2	1	94		T
SEP 17,83	SEP 16,83	800	800	****	****	1	17.9	1	18260	2	1	96		
SEP 19,83	SEP 18,83	800	800	****	****	1	1.0	1	18259	2	1	46		N
SEP 21,83	SEP 20,83	800	800	1900	600	1	****	1	18258	2	1	****		
OCT 5,83	OCT 4,83	800	800	****	****	1	2.4	1	18267	2	1	53		
OCT 6,83	OCT 5,83	800	800	****	****	1	4.8	1	18266	2	1	87		
OCT 9,83	OCT 8,83	800	800	****	****	1	5.0	1	18265	2	1	97		
OCT 12,83	OCT 11,83	800	800	****	****	1	9.0	1	18264	2	1	100		
OCT 13,83	OCT 12,83	800	800	****	****	1	5.2	1	18263	2	1	93		
OCT 14,83	OCT 13,83	800	800	****	****	1	2.8	1	18262	2	1	96		

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : MELBOURNE/DAILY/AEROCHEM #01

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
MAY 24,83	MAY 23,83	******	******	******	******	******	******	******
MAY 26,83	MAY 25,83	261.0	35.5	4.07	4.26	0.0928	3.65	0.53
MAY 30,83	MAY 29,83	986.0	36.5	4.06	4.19	0.1006	3.45	0.36
JUN 1,83	MAY 31,83	672.0	24.4	4.28	4.51	0.0614	3.15	0.35
JUN 4,83	JUN 3,83	687.0	66.5	3.73	3.90	0.1696	5.45	0.86
JUN 6,83	JUN 5,83	398.0	D 19.8	4.26	4.67	0.0482	2.35	0.31
JUN 7,83	JUN 6,83	191.0	6.2	4.79	G 5.26	0.0256	0.70	0.10
JUN 10,83	JUN 9,83	181.0	******	3.81	4.04	0.1400	8.60	1.42
JUN 28,83	JUN 27,83	2022.0	******	3.93	4.13	0.1218	6.80	1.45
JUN 29,83	JUN 28,83	50.0	******	******	******	******	******	******
JUL 1,83	JUN 30,83	201.0	71.0	D 3.74	3.89	0.1822	7.15	0.66
JUL 5,83	JUL 4,83	1758.0	12.9	4.68	4.82	0.0336	1.50	0.14
JUL 18,83	JUL 17,83	2200.0	19.0	4.69	4.87	0.0366	3.15	0.41
JUL 20,83	JUL 19,83	14.0	******	******	******	******	******	******
JUL 21,83	JUL 20,83	293.0	11.9	U 5.20	U 6.33	0.0190	1.70	0.49
JUL 24,83	JUL 23,83	54.0	******	******	4.37	0.0824	5.20	1.06
JUL 29,83	JUL 28,83	2192.0	33.4	4.16	4.26	0.0774	3.60	0.47
JUL 30,83	JUL 29,83	934.0	U 88.0	U 3.74	U 3.84	D 0.1926	U 9.95	1.02
JUL 31,83	JUL 30,83	1351.0	27.4	4.20	4.38	0.0698	2.90	0.25
AUG 1,83	JUL 31,83	340.0	38.4	4.18	4.28	0.0840	5.00	0.54
AUG 2,83	AUG 1,83	8.0	******	******	******	******	******	******
AUG 4,83	AUG 3,83	2651.0	62.0	******	D 3.99	0.1422	D 6.15	0.73
AUG 9,83	AUG 8,83	1316.0	15.5	4.72	U 5.36	0.0268	3.00	0.32
AUG 11,83	AUG 10,83	741.0	******	3.89	4.00	0.1310	6.05	0.62
AUG 16,83	AUG 11,83	1596.0	29.4	4.01	4.40	0.0738	3.35	0.23
AUG 22,83	AUG 21,83	134.0	57.0	******	4.04	0.1328	7.30	1.14
AUG 23,83	AUG 22,83	******	******	******	******	******	******	******
AUG 26,83	AUG 25,83	******	******	******	******	******	******	******
AUG 31,83	AUG 30,83	1912.0	36.0	3.70	4.31	D 0.0852	4.10	0.47
SEP 7,83	SEP 6,83	50.0	******	******	U 3.81	0.2240	U 14.20	1.37
SEP 16,83	SEP 15,83	676.0	50.5	3.69	4.02	0.0946	3.35	0.82
SEP 17,83	SEP 16,83	1112.0	40.6	3.81	4.18	0.0674	4.20	0.35
SEP 19,83	SEP 18,83	30.0	******	******	4.24	0.0598	4.95	D 0.71
SEP 21,83	SEP 20,83	1895.0	11.3	4.34	4.74	0.0318	1.05	0.10
OCT 5,83	OCT 4,83	82.0	33.4	******	U 5.12	0.0376	6.50	1.36
OCT 6,83	OCT 5,83	269.0	16.3	4.29	4.47	0.0492	1.40	0.35
OCT 9,83	OCT 8,83	314.0	17.5	4.34	4.72	0.0412	2.85	0.31
OCT 12,83	OCT 11,83	578.0	13.2	4.31	4.60	0.0428	1.00	0.23
OCT 13,83	OCT 12,83	313.0	21.2	3.95	4.40	0.0660	1.80	0.26
OCT 14,83	OCT 13,83	174.0	23.6	******	4.36	0.0670	2.65	0.32

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : MELBOURNE/DAILY/AEROCHEM #01

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
MAY 24,83	MAY 23,83	******	******	******	******	******	******	******
MAY 26,83	MAY 25,83	0.42	0.20	0.075	0.045	0.050	0.420	0.0550
MAY 30,83	MAY 29,83	0.15	0.12	0.035	0.035	0.035	0.320	0.0646
JUN 1,83	MAY 31,83	0.32	0.25	0.060	0.070	0.035	0.550	0.0309
JUN 4,83	JUN 3,83	0.24	0.25	0.050	0.015	0.040	0.266	0.1259
JUN 6,83	JUN 5,83	0.23	0.10	0.040	0.045	0.050	D 0.430	0.0214
JUN 7,83	JUN 6,83	0.19	0.08	0.040	0.040	0.050	0.102	G 0.0055
JUN 10,83	JUN 9,83	1.44	0.40	0.265	0.080	0.100	0.116	0.0912
JUN 28,83	JUN 27,83	******	0.20	******	******	******	0.880	0.0741
JUN 29,83	JUN 28,83	******	******	******	******	******	******	******
JUL 1,83	JUN 30,83	0.36	0.27	D 0.050	0.065	0.100	0.390	0.1288
JUL 5,83	JUL 4,83	0.14	0.18	0.030	0.065	0.090	0.190	0.0151
JUL 18,83	JUL 17,83	0.70	0.16	0.135	0.055	0.055	0.550	0.0135
JUL 20,83	JUL 19,83	******	******	******	******	******	******	******
JUL 21,83	JUL 20,83	0.66	0.19	0.110	0.125	0.125	0.550	U 0.0005
JUL 24,83	JUL 23,83	******	0.65	******	******	******	******	0.0427
JUL 29,83	JUL 28,83	0.42	0.17	0.080	0.030	0.070	0.276	0.0550
JUL 30,83	JUL 29,83	0.94	0.37	0.155	0.065	0.155	U 0.950	U 0.1445
JUL 31,83	JUL 30,83	0.10	0.10	0.025	0.040	0.040	0.222	0.0417
AUG 1,83	JUL 31,83	U 0.33	0.14	0.075	0.100	0.055	0.900	0.0525
AUG 2,83	AUG 1,83	******	******	******	******	******	******	******
AUG 4,83	AUG 3,83	0.35	0.19	0.080	0.035	0.040	0.570	D 0.1023
AUG 9,83	AUG 8,83	0.75	0.21	0.165	0.075	0.055	0.430	U 0.0044
AUG 11,83	AUG 10,83	0.27	0.20	0.050	0.065	0.055	0.740	0.1000
AUG 16,83	AUG 11,83	0.12	0.10	0.020	<W 0.005	<W 0.005	0.400	0.0398
AUG 22,83	AUG 21,83	1.17	0.31	0.190	0.060	D 0.135	0.332	0.0912
AUG 23,83	AUG 22,83	******	******	******	******	******	******	******
AUG 26,83	AUG 25,83	******	******	******	******	******	******	******
AUG 31,83	AUG 30,83	0.20	0.14	0.030	0.070	0.065	0.520	0.0490
SEP 7,83	SEP 6,83	******	0.62	******	******	******	0.950	U 0.1549
SEP 16,83	SEP 15,83	0.28	0.21	0.030	0.055	0.035	0.146	0.0955
SEP 17,83	SEP 16,83	0.16	0.12	0.015	0.035	0.035	0.490	0.0661
SEP 19,83	SEP 18,83	******	0.24	******	******	******	******	0.0575
SEP 21,83	SEP 20,83	0.15	0.02	0.020	<T 0.010	<W 0.005	0.084	0.0182
OCT 5,83	OCT 4,83	U 2.00	0.31	U 0.500	0.200	0.130	******	U 0.0076
OCT 6,83	OCT 5,83	0.17	0.04	0.015	0.020	<T 0.010	0.272	0.0339
OCT 9,83	OCT 8,83	D 0.51	0.04	0.035	0.060	<T 0.010	0.520	0.0191
OCT 12,83	OCT 11,83	0.10	<W 0.01	0.010	<T 0.005	0.015	0.110	0.0251
OCT 13,83	OCT 12,83	0.09	0.08	0.010	0.020	0.030	0.124	0.0398
OCT 14,83	OCT 13,83	0.35	0.13	0.035	0.060	0.025	0.180	0.0437

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : MELBOURNE/DAILY/AEROCHEM #01

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES		SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
OCT 17,83	OCT 16,83	800	800	****	****	1	0.8	1	18268	2	1		13	CDE	N
OCT 23,83	OCT 22,83	800	900	1000	600	1	29.1	1	18269	2	1		89		J
OCT 26,83	OCT 25,83	800	800	****	****	1	0.8	1	18270	2	1		64	CD	
OCT 29,83	OCT 28,83	800	800	500	600	1	1.0	1	18271	2	1		42		N
NOV 2,83	NOV 1,83	800	800	1600	2200	1	3.9	1	18272	2	1		88		JM
NOV 3,83	NOV 2,83	800	800	****	****	1	5.3	1	18273	2	1		93		J
NOV 11,83	NOV 10,83	800	800	****	****	1	12.0	1	18274	2	1		88	C	J
NOV 12,83	NOV 11,83	800	800	****	****	3	6.0	2	18275	2	1		80		JC
NOV 16,83	NOV 15,83	800	800	****	****	3	12.7	2	18276	2	1		99		J
NOV 17,83	NOV 16,83	800	800	****	****	3	4.3	2	18277	2	1		61		
NOV 20,83	NOV 19,83	800	800	****	****	1	5.2	1	18278	2	1		91		J
NOV 21,83	NOV 20,83	800	800	****	****	1	4.0	1	18279	2	1		84		J
NOV 23,83	NOV 22,83	800	800	****	****	1	4.8	1	18280	2	1		86		J
NOV 24,83	NOV 23,83	800	800	****	****	1	5.3	2	18281	2	1		73	C	J
NOV 28,83	NOV 27,83	800	800	****	****	1	12.3	2	18283	2	1		81		J
NOV 29,83	NOV 28,83	800	800	1600	1800	1	9.8	2	18284	2	1		85		J
DEC 6,83	DEC 5,83	800	800	1000	800	2	22.0	2	18285	2	1		107	C	M
DEC 7,83	DEC 6,83	800	800	****	****	3	24.0	2	18286	2	1		108	C	M
DEC 8,83	DEC 7,83	800	800	****	****	2	0.8	2	18287	2	1		48	C	N
DEC 10,83	DEC 9,83	800	900	****	****	2	4.2	2	18288	2	1		78	CD	
DEC 12,83	DEC 11,83	800	800	****	****	1	19.8	2	18289	2	1		86	C	
DEC 13,83	DEC 12,83	800	800	****	****	1	1.9	2	18290	2	1		94	C	
DEC 15,83	DEC 14,83	800	800	****	****	1	1.7	2	18291	2	1	U	74	G	
DEC 22,83	DEC 21,83	800	800	****	****	3	25.4	2	18292	2	1		80		
DEC 28,83	DEC 27,83	800	1330	****	****	2	8.9	2	18293	2	1		****	EIK	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : MELBOURNE/DAILY/AEROCHEM #01

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM		PH FIELD		PH LAB		TOTAL H+ TO PH8.3 MG/L		SULPHATE MG/L		NITRATE AS N MG/L
OCT 17,83	OCT 16,83	7.0	******		******		******		******		******		******
OCT 23,83	OCT 22,83	1666.0	18.1		3.30		4.45	G	0.4780		2.00		0.30
OCT 26,83	OCT 25,83	33.0	******		******	U	3.98		0.1764	U	10.60	U	1.38
OCT 29,83	OCT 28,83	27.0	******		******	U	7.77		0.0152		******		******
NOV 2,83	NOV 1,83	222.0	31.6	U	2.12		4.31		0.0864		3.20		0.60
NOV 3,83	NOV 2,83	316.0	30.9		3.68		4.25		0.0844		3.00		0.51
NOV 11,83	NOV 10,83	681.0	19.3	U	2.46		4.54		0.0508		1.75		0.27
NOV 12,83	NOV 11,83	308.0	5.6		3.72	U	5.69		0.0188		0.60	<T	0.01
NOV 16,83	NOV 15,83	811.0	19.5	U	2.41		4.39		0.0630		0.75		0.58
NOV 17,83	NOV 16,83	170.0	20.2		******		4.47		0.0532		1.25		0.48
NOV 20,83	NOV 19,83	304.0	40.8	U	2.45		4.14		0.1034		3.35		0.86
NOV 21,83	NOV 20,83	217.0	26.4	U	3.19		4.32		0.0736		2.80		0.23
NOV 23,83	NOV 22,83	267.0	51.2	U	3.19		4.04		0.1262		5.45		0.61
NOV 24,83	NOV 23,83	250.0	39.8	U	2.97		4.16		0.0954		3.50		0.51
NOV 28,83	NOV 27,83	644.0	17.0	U	3.16		4.55		0.0484		1.35		0.20
NOV 29,83	NOV 28,83	536.0	30.5	U	3.07		4.30		0.0756		2.75		0.37
DEC 6,83	DEC 5,83	1523.0	20.2		******		4.43		0.0546		1.85		0.28
DEC 7,83	DEC 6,83	1663.0	25.3		******		4.34		0.0696		2.60		0.18
DEC 8,83	DEC 7,83	25.0	******		******		4.63		0.0400		0.45		0.33
DEC 10,83	DEC 9,83	211.0	18.3		******		4.73		0.0362		0.85		0.62
DEC 12,83	DEC 11,83	1103.0	28.8		******		4.24		0.0762		2.20		0.49
DEC 13,83	DEC 12,83	115.0	45.5		******		4.04		0.1178		3.95		0.92
DEC 15,83	DEC 14,83	81.0	******		******		4.01		0.1274		4.85		0.91
DEC 22,83	DEC 21,83	1307.0	27.0		******		4.31		0.0688		2.55		0.35
DEC 28,83	DEC 27,83	******	******		******		******		******		******		******

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : MELBOURNE/DAILY/AEROCHEM #01

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
OCT 17,83	OCT 16,83	******	******	******	******	******	******	******
OCT 23,83	OCT 22,83	0.22	0.32	0.065	0.030	0.060	0.078	0.0355
OCT 26,83	OCT 25,83	******	U 0.93	******	******	******	******	U 0.1047
OCT 29,83	OCT 28,83	******	******	******	******	******	******	U 0.0000
NOV 2,83	NOV 1,83	0.33	0.10	0.045	0.040	0.060	0.218	0.0490
NOV 3,83	NOV 2,83	0.18	0.23	0.030	0.045	0.135	0.188	0.0562
NOV 11,83	NOV 10,83	0.11	0.12	0.010	0.020	0.020	0.272	0.0288
NOV 12,83	NOV 11,83	0.12	0.04	0.020	0.055	0.030	0.080	U 0.0020
NOV 16,83	NOV 15,83	0.06	0.05	0.010	<T 0.010	0.015	0.088	0.0407
NOV 17,83	NOV 16,83	0.08	0.05	0.010	0.025	0.020	0.264	0.0339
NOV 20,83	NOV 19,83	0.35	0.31	0.010	0.045	0.170	0.344	0.0724
NOV 21,83	NOV 20,83	0.18	0.21	0.025	0.020	0.075	D 0.114	0.0479
NOV 23,83	NOV 22,83	0.40	0.54	0.065	0.065	0.320	0.364	0.0912
NOV 24,83	NOV 23,83	0.36	0.37	0.030	0.050	0.270	0.120	0.0692
NOV 28,83	NOV 27,83	0.12	0.08	D 0.010	<T 0.010	0.020	0.040	0.0282
NOV 29,83	NOV 28,83	0.14	0.17	0.015	0.035	0.020	0.246	0.0501
DEC 6,83	DEC 5,83	0.05	0.07	0.010	<T 0.010	<T 0.010	0.098	0.0372
DEC 7,83	DEC 6,83	0.04	0.05	0.005	<T 0.005	<T 0.010	0.072	0.0457
DEC 8,83	DEC 7,83	******	0.09	******	******	******	******	0.0234
DEC 10,83	DEC 9,83	******	0.23	******	******	******	******	0.0186
DEC 12,83	DEC 11,83	0.06	0.12	0.015	0.020	0.085	0.118	0.0575
DEC 13,83	DEC 12,83	******	0.16	******	******	******	0.154	0.0912
DEC 15,83	DEC 14,83	******	0.37	******	******	******	0.430	0.0977
DEC 22,83	DEC 21,83	0.10	0.09	0.025	<T 0.015	0.060	0.110	0.0490
DEC 28,83	DEC 27,83	******	******	******	******	******	******	******

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NORTH EASTHOPE/DAILY/AEROCHEM #03

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
JAN 7,83	JAN 6,83	800	800	****	****	2	5.7	2	18568	2	1	37	C	N
JAN 8,83	JAN 7,83	800	800	****	****	2	****	2	18569	2	1	****		
JAN 11,83	JAN 10,83	800	800	****	****	1	19.7	2	18570	2	1	101	C	
JAN 12,83	JAN 11,83	800	800	****	****	2	5.3	2	18571	2	1	71	C	
JAN 15,83	JAN 14,83	800	800	****	****	2	7.3	2	18572	2	1	****	IKFE	
JAN 17,83	JAN 16,83	800	800	****	****	2	1.1	2	18573	2	1	****	KE	
JAN 23,83	JAN 20,83	800	800	****	****	2	0.7	2	18575	2	1	U 100	CDHL	Y3
JAN 24,83	JAN 23,83	800	800	****	****	3	1.5	2	18576	2	1	****	EK	
JAN 25,83	JAN 24,83	800	800	****	****	2	2.5	2	18577	2	1	U 28	CL	N
JAN 26,83	JAN 25,83	800	800	****	****	3	1.5	2	18578	2	1	U 12	DHL	N
JAN 27,83	JAN 26,83	800	800	****	****	2	0.3	2	18579	2	1	****	EIK	
JAN 30,83	JAN 27,83	800	800	****	****	1	1.3	2	18580	2	1	148		NY3
JAN 31,83	JAN 30,83	800	800	****	****	3	4.7	2	18581	2	1	94	D	
FEB 1,83	JAN 31,83	800	800	****	****	2	****	2	18582	2	1	****		
FEB 2,83	FEB 1,83	800	800	****	****	1	3.9	2	18583	2	1	94	CD	
FEB 3,83	FEB 2,83	800	800	800	800	1	13.3	2	18584	2	1	83	C	
FEB 5,83	FEB 4,83	800	800	1400	1800	2	****	2	18585	2	1	****	C	
FEB 7,83	FEB 6,83	800	800	****	****	2	4.9	2	18586	2	1	****		
FEB 8,83	FEB 7,83	800	800	800	1000	2	****	2	18587	2	1	****		
FEB 16,83	FEB 15,83	800	800	****	****	3	****	2	18590	2	1	****	D	
FEB 17,83	FEB 16,83	800	800	****	****	1	1.3	2	18591	2	1	102	CD	
FEB 23,83	FEB 22,83	800	800	****	****	3	8.9	2	18592	2	1	77	C	
MAR 4,83	MAR 3,83	800	800	****	****	1	****	2	18593	2	1	****	CD	
MAR 7,83	MAR 6,83	800	800	****	****	1	2.9	2	18594	2	1	106	CD	
MAR 8,83	MAR 7,83	800	800	****	****	1	1.7	2	18595	2	1	59	C	
MAR 9,83	MAR 8,83	800	800	****	****	1	1.5	2	18596	2	1	57	C	
MAR 19,83	MAR 18,83	800	800	1000	800	1	9.1	2	18597	2	1	93	C	
MAR 20,83	MAR 19,83	800	800	800	800	1	4.7	2	18598	2	1	114	C	
MAR 21,83	MAR 20,83	800	800	****	****	2	4.6	2	18599	2	1	****	EFIK	
MAR 22,83	MAR 21,83	800	800	****	****	2	7.9	2	18600	2	1	22	C	NC
MAR 23,83	MAR 22,83	800	800	****	****	2	3.1	2	63001	2	1	****	EFIK	
MAR 28,83	MAR 27,83	800	800	900	1500	3	4.4	2	63002	2	1	8	CD	N
MAR 29,83	MAR 28,83	800	800	****	****	2	****	2	63003	2	1	****		
APR 3,83	APR 2,83	800	800	****	****	1	3.9	2	63004	2	1	75	C	JH
APR 4,83	APR 3,83	800	800	****	****	1	2.7	2	63005	2	1	58	CD	
APR 7,83	APR 6,83	800	800	****	****	1	13.1	2	63006	2	1	64		
APR 8,83	APR 7,83	800	800	****	****	1	2.0	1	63007	2	1	69		
APR 10,83	APR 9,83	800	800	****	****	1	22.2	1	63008	2	1	97	C	C
APR 11,83	APR 10,83	800	800	****	****	1	2.6	1	63009	2	1	125		N
APR 14,83	APR 13,83	800	800	****	****	1	7.6	1	63010	2	1	84	CD	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NORTH EASTHOPE/DAILY/AEROCHEM #03

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
JAN 7,83	JAN 6,83	136.0	******	******	******	******	******	******
JAN 8,83	JAN 7,83	7.0	******	******	4.45	0.0664	******	******
JAN 11,83	JAN 10,83	1284.0	******	4.49	4.72	0.0470	2.05	0.45
JAN 12,83	JAN 11,83	244.0	******	4.31	******	******	******	******
JAN 15,83	JAN 14,83	******	******	******	******	******	******	******
JAN 17,83	JAN 16,83	******	******	******	******	******	******	******
JAN 23,83	JAN 20,83	45.0	******	******	U 3.82	G 0.2120	U 9.40	2.10
JAN 24,83	JAN 23,83	******	******	******	******	******	******	******
JAN 25,83	JAN 24,83	45.0	******	******	3.60	G 0.2960	******	******
JAN 26,83	JAN 25,83	12.0	******	******	******	******	******	******
JAN 27,83	JAN 26,83	******	******	******	******	******	******	******
JAN 30,83	JAN 27,83	124.0	G 73.0	******	3.81	0.1908	5.05	1.40
JAN 31,83	JAN 30,83	286.0	48.9	4.02	D 4.02	0.1312	4.55	0.66
FEB 1,83	JAN 31,83	13.0	******	******	******	******	******	******
FEB 2,83	FEB 1,83	237.0	30.7	4.22	4.17	0.0970	3.25	0.31
FEB 3,83	FEB 2,83	709.0	37.3	4.13	4.09	0.1062	2.70	0.58
FEB 5,83	FEB 4,83	47.0	******	******	3.92	0.1532	3.30	1.37
FEB 7,83	FEB 6,83	******	******	******	******	******	******	******
FEB 8,83	FEB 7,83	10.0	******	******	******	******	******	******
FEB 16,83	FEB 15,83	52.0	******	******	4.17	0.0934	3.65	1.13
FEB 17,83	FEB 16,83	85.0	******	******	U 3.97	0.1262	U 15.00	U 5.20
FEB 23,83	FEB 22,83	440.0	61.0	3.86	3.90	0.1498	4.60	0.80
MAR 4,83	MAR 3,83	56.0	******	******	4.27	0.0884	8.20	2.10
MAR 7,83	MAR 6,83	198.0	33.0	4.27	4.22	0.0746	3.60	0.40
MAR 8,83	MAR 7,83	65.0	******	******	******	******	7.00	1.89
MAR 9,83	MAR 8,83	55.0	******	******	******	******	8.30	1.55
MAR 19,83	MAR 18,83	543.0	15.5	******	4.70	0.0414	1.50	0.28
MAR 20,83	MAR 19,83	345.0	10.6	******	4.81	0.0376	1.20	0.15
MAR 21,83	MAR 20,83	******	******	******	******	******	******	******
MAR 22,83	MAR 21,83	114.0	7.5	******	U 6.95	0.0152	0.80	0.04
MAR 23,83	MAR 22,83	******	******	******	******	******	******	******
MAR 28,83	MAR 27,83	25.0	******	******	******	******	5.95	1.88
MAR 29,83	MAR 28,83	65.0	******	******	U 4.03	0.1400	4.75	0.94
APR 3,83	APR 2,83	189.0	******	U 6.70	U 5.29	0.0240	3.90	1.23
APR 4,83	APR 3,83	101.0	******	******	4.16	0.0968	5.20	0.83
APR 7,83	APR 6,83	544.0	36.3	4.30	******	******	3.55	0.42
APR 8,83	APR 7,83	89.0	******	******	4.27	0.0958	3.65	0.56
APR 10,83	APR 9,83	1394.0	17.5	4.72	4.66	D 0.0468	1.15	0.21
APR 11,83	APR 10,83	210.0	43.8	4.29	4.17	0.1014	5.05	0.61
APR 14,83	APR 13,83	413.0	39.0	D 4.29	4.18	0.0990	3.35	0.52

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NORTH EASTHOPE/DAILY/AEROCHEM #03 PAGE : 3

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
JAN 7,83	JAN 6,83	******	******	******	******	******	******	******
JAN 8,83	JAN 7,83	******	******	******	******	******	******	0.0355
JAN 11,83	JAN 10,83	******	0.28	******	******	******	******	0.0191
JAN 12,83	JAN 11,83	******	******	******	******	******	******	******
JAN 15,83	JAN 14,83	******	******	******	******	******	******	******
JAN 17,83	JAN 16,83	******	******	******	******	******	******	******
JAN 23,83	JAN 20,83	******	U 1.22	******	******	******	0.232	U 0.1514
JAN 24,83	JAN 23,83	******	******	******	******	******	******	******
JAN 25,83	JAN 24,83	******	******	******	******	******	******	0.2512
JAN 26,83	JAN 25,83	******	******	******	******	******	******	******
JAN 27,83	JAN 26,83	******	******	******	******	******	******	******
JAN 30,83	JAN 27,83	0.32	0.59	0.070	0.115	0.250	0.650	0.1549
JAN 31,83	JAN 30,83	0.08	0.15	0.015	0.035	0.050	0.720	D 0.0955
FEB 1,83	JAN 31,83	******	******	******	******	******	******	******
FEB 2,83	FEB 1,83	0.17	0.29	0.015	0.160	0.165	0.164	0.0676
FEB 3,83	FEB 2,83	0.08	0.36	0.015	0.090	0.155	0.244	0.0813
FEB 5,83	FEB 4,83	******	0.91	******	******	******	******	0.1202
FEB 7,83	FEB 6,83	******	******	******	******	******	******	******
FEB 8,83	FEB 7,83	******	******	******	******	******	******	******
FEB 16,83	FEB 15,83	******	0.53	******	******	******	******	0.0676
FEB 17,83	FEB 16,83	1.02	U 1.40	0.170	0.175	0.470	******	U 0.1072
FEB 23,83	FEB 22,83	0.12	0.22	0.025	0.030	0.065	0.550	0.1259
MAR 4,83	MAR 3,83	******	0.52	******	******	******	******	0.0537
MAR 7,83	MAR 6,83	0.50	0.38	0.095	0.075	0.230	******	0.0603
MAR 8,83	MAR 7,83	******	U 1.30	U 0.400	U 0.380	U 0.790	******	******
MAR 9,83	MAR 8,83	******	U 0.86	******	******	******	******	******
MAR 19,83	MAR 18,83	0.15	0.29	0.045	0.080	0.200	0.218	0.0200
MAR 20,83	MAR 19,83	0.06	0.09	0.010	0.055	0.070	0.232	0.0155
MAR 21,83	MAR 20,83	******	******	******	******	******	******	******
MAR 22,83	MAR 21,83	0.89	0.07	U 0.275	0.025	0.060	<W 0.002	U 0.0001
MAR 23,83	MAR 22,83	******	******	******	******	******	******	******
MAR 28,83	MAR 27,83	******	U 1.23	******	******	******	******	******
MAR 29,83	MAR 28,83	0.25	0.27	0.060	0.060	0.105	******	U 0.0933
APR 3,83	APR 2,83	U 2.00	U 1.37	U 0.500	U 0.760	U 0.910	0.520	U 0.0051
APR 4,83	APR 3,83	0.40	0.64	0.090	U 0.430	0.470	******	0.0692
APR 7,83	APR 6,83	0.30	0.24	0.040	D 0.180	0.180	0.170	******
APR 8,83	APR 7,83	0.32	0.25	0.080	0.130	0.155	******	0.0537
APR 10,83	APR 9,83	0.09	0.06	0.005	0.035	0.030	0.164	0.0219
APR 11,83	APR 10,83	0.28	0.35	0.050	0.215	0.250	0.800	0.0676
APR 14,83	APR 13,83	0.20	0.25	0.035	0.110	U 0.160	0.264	0.0661

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NORTH EASTHOPE/DAILY/AEROCHEM #03 PAGE : 4

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES		SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
APR 15,83	APR 14,83	800	800	800	1600	1	16.4	1	63011	2	1		99	D	
APR 17,83	APR 16,83	800	800	****	****	3	0.6	1	63012	2	1		51	C	
APR 18,83	APR 17,83	800	800	****	****	3	7.4	2	63013	2	1		74		J
APR 27,83	APR 26,83	800	800	2300	2400	1	3.0	1	63014	2	1		56	C	
APR 29,83	APR 28,83	800	800	1000	1800	1	14.2	1	63015	2	1		102	C	
APR 30,83	APR 29,83	800	800	****	****	1	****	1	63016	2	1		****	CD	
MAY 1,83	APR 30,83	800	800	****	****	1	14.4	1	63017	2	1		107		
MAY 2,83	MAY 1,83	800	800	****	****	1	16.6	1	63018	2	1		79		
MAY 3,83	MAY 2,83	800	800	1330	2000	1	26.2	1	63019	2	1		94	C	
MAY 4,83	MAY 3,83	800	800	1200	1600	1	5.0	1	63020	2	1		85	D	
MAY 5,83	MAY 4,83	800	800	****	****	1	2.2	1	63021	2	1		30	CD	N
MAY 7,83	MAY 6,83	800	800	****	****	1	1.4	1	63022	2	1		57		
MAY 8,83	MAY 7,83	800	800	****	****	1	15.8	1	63023	2	1		90		
MAY 15,83	MAY 14,83	800	800	****	****	1	13.2	1	63024	2	1		97	C	
MAY 20,83	MAY 19,83	800	800	****	****	1	15.2	1	63025	2	1		207		N
MAY 23,83	MAY 22,83	800	800	****	****	1	9.4	1	63026	2	1		93		
MAY 26,83	MAY 25,83	800	800	****	****	1	7.0	1	63027	2	1		80	A	
MAY 30,83	MAY 29,83	800	800	1100	1700	1	19.8	1	63028	2	1		100		
MAY 31,83	MAY 30,83	800	800	1600	1700	1	0.3	1	63029	2	1		77	C	
JUN 1,83	MAY 31,83	800	800	1200	1800	1	13.0	1	63030	2	1		98	C	
JUN 4,83	JUN 3,83	800	800	****	****	1	8.0	1	63031	2	1		81		
JUN 5,83	JUN 4,83	800	800	****	****	1	4.0	1	63032	2	1		98		
JUN 6,83	JUN 5,83	800	800	****	****	1	4.3	1	63033	2	1		103		
JUN 7,83	JUN 6,83	800	800	800	1200	1	3.6	1	63034	2	1	U	250	P	N
JUN 10,83	JUN 9,83	800	800	****	****	1	0.9	1	63035	2	1		36		N
JUN 28,83	JUN 27,83	800	800	****	****	1	34.8	1	63037	2	1		101		
JUL 1,83	JUN 30,83	800	800	1700	1900	1	3.9	1	63038	2	1		88	C	
JUL 5,83	JUL 4,83	800	800	****	****	1	43.6	1	63039	2	1		105	D	
JUL 29,83	JUL 28,83	800	800	100	800	1	82.4	1	63040	2	1		103	C	
JUL 30,83	JUL 29,83	800	800	800	1200	1	5.2	1	63041	2	1		88	CD	
JUL 31,83	JUL 30,83	800	800	****	****	1	22.1	1	63042	2	1		101	C	
AUG 1,83	JUL 31,83	800	800	****	****	1	6.3	1	63043	2	1		97	CD	
AUG 4,83	AUG 3,83	800	800	****	****	1	13.0	1	63044	2	1		99		
AUG 5,83	AUG 4,83	800	800	****	****	1	5.2	1	63045	2	1		97	C	
AUG 9,83	AUG 8,83	800	800	****	****	1	11.1	2	63046	2	1		94		J
AUG 11,83	AUG 10,83	800	800	2330	800	1	23.2	1	63047	2	1		90		
AUG 12,83	AUG 11,83	800	800	800	800	1	9.0	1	63048	2	1		95		M
AUG 18,83	AUG 17,83	800	800	1700	1800	1	1.2	1	63050	2	1		81		
AUG 22,83	AUG 21,83	800	800	2300	200	1	15.0	1	63052	2	1		116		J
AUG 26,83	AUG 25,83	800	806	600	730	1	3.6	1	63049	2	1		61		

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NORTH EASTHOPE/DAILY/AEROCHEM #03

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
APR 15,83	APR 14,83	1042.0	25.3	4.66	4.43	0.0634	2.75	0.32
APR 17,83	APR 16,83	20.0	******	******	4.34	0.0820	******	******
APR 18,83	APR 17,83	354.0	13.1	U 5.37	4.92	0.0344	1.15	0.38
APR 27,83	APR 26,83	108.0	******	******	U 7.28	0.0200	4.20	0.53
APR 29,83	APR 28,83	929.0	19.1	4.47	4.68	0.0448	2.40	0.33
APR 30,83	APR 29,83	40.0	******	******	3.67	G 0.2820	******	******
MAY 1,83	APR 30,83	989.0	17.9	4.44	4.51	0.0520	1.65	0.20
MAY 2,83	MAY 1,83	848.0	18.7	4.34	4.44	D 0.0540	1.80	D 0.14
MAY 3,83	MAY 2,83	1585.0	20.9	4.42	4.55	0.0496	2.55	0.35
MAY 4,83	MAY 3,83	274.0	20.1	4.33	4.43	0.0584	2.25	0.12
MAY 5,83	MAY 4,83	43.0	******	******	G 5.63	0.0304	4.45	1.67
MAY 7,83	MAY 6,83	52.0	******	******	U 5.73	0.0278	7.30	0.79
MAY 8,83	MAY 7,83	916.0	17.6	4.58	4.71	0.0436	2.30	0.23
MAY 15,83	MAY 14,83	829.0	29.9	4.31	4.55	0.0620	4.15	0.50
MAY 20,83	MAY 19,83	2019.0	15.0	4.44	4.65	0.0454	1.70	0.10
MAY 23,83	MAY 22,83	565.0	41.1	4.02	4.15	0.1046	3.75	0.49
MAY 26,83	MAY 25,83	359.0	31.4	4.06	U 4.29	0.0786	U 2.95	0.39
MAY 30,83	MAY 29,83	1278.0	37.9	4.08	4.23	0.0914	3.65	D 0.54
MAY 31,83	MAY 30,83	15.0	******	******	G 5.26	0.0364	******	******
JUN 1,83	MAY 31,83	817.0	19.4	4.51	4.58	D 0.1376	1.95	0.24
JUN 4,83	JUN 3,83	418.0	32.5	4.09	4.21	0.0874	3.00	0.32
JUN 5,83	JUN 4,83	252.0	32.1	4.13	4.24	0.0836	3.15	0.34
JUN 6,83	JUN 5,83	284.0	9.8	4.66	G 5.11	0.0286	1.20	0.16
JUN 7,83	JUN 6,83	577.0	2.6	G 5.48	G 5.83	0.0222	0.20	0.02
JUN 10,83	JUN 9,83	21.0	******	******	4.77	0.0658	******	******
JUN 28,83	JUN 27,83	2273.0	28.1	D 4.14	4.29	0.0746	3.10	0.27
JUL 1,83	JUN 30,83	222.0	******	3.92	4.02	0.1288	4.65	0.57
JUL 5,83	JUL 4,83	2945.0	11.7	4.68	4.86	0.0348	1.80	0.17
JUL 29,83	JUL 28,83	5478.0	21.3	4.38	4.46	0.0552	2.50	0.24
JUL 30,83	JUL 29,83	295.0	42.5	4.08	4.17	0.0948	4.15	0.79
JUL 31,83	JUL 30,83	1444.0	20.3	4.25	4.45	0.0564	1.90	0.16
AUG 1,83	JUL 31,83	395.0	39.5	4.08	4.20	0.0892	4.25	0.54
AUG 4,83	AUG 3,83	830.0	31.0	4.11	4.25	0.0736	2.95	0.39
AUG 5,83	AUG 4,83	326.0	56.0	4.09	******	******	8.65	0.78
AUG 9,83	AUG 8,83	669.0	16.0	U 5.76	U 6.89	0.0194	2.75	0.42
AUG 11,83	AUG 10,83	1345.0	39.3	3.88	4.28	0.0960	3.65	0.51
AUG 12,83	AUG 11,83	551.0	34.0	3.92	4.28	0.0900	3.25	0.29
AUG 18,83	AUG 17,83	63.0	******	******	U 3.72	0.2560	U 14.60	1.56
AUG 22,83	AUG 21,83	1123.0	31.5	3.76	4.30	0.0778	3.30	0.41
AUG 26,83	AUG 25,83	142.0	22.6	******	4.45	0.0616	2.05	0.45

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NORTH EASTHOPE/DAILY/AEROCHEM #03

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
APR 15,83	APR 14,83	0.44	0.17	0.045	0.050	0.100	0.206	0.0372
APR 17,83	APR 16,83	******	******	******	******	******	******	0.0457
APR 18,83	APR 17,83	0.23	0.12	0.045	0.040	0.055	0.380	0.0120
APR 27,83	APR 26,83	U 2.55	0.38	U 0.550	0.145	0.240	******	U 0.0001
APR 29,83	APR 28,83	0.39	0.08	0.085	0.030	0.055	0.440	0.0209
APR 30,83	APR 29,83	******	******	******	******	******	******	0.2138
MAY 1,83	APR 30,83	0.03	0.03	0.020	0.035	0.045	0.184	0.0309
MAY 2,83	MAY 1,83	0.09	0.06	0.015	0.040	0.040	0.168	0.0363
MAY 3,83	MAY 2,83	0.37	0.19	0.060	0.070	0.130	0.470	0.0282
MAY 4,83	MAY 3,83	0.18	0.08	0.035	0.070	0.055	0.162	0.0372
MAY 5,83	MAY 4,83	******	0.66	******	******	******	******	G 0.0023
MAY 7,83	MAY 6,83	******	0.56	******	******	******	******	U 0.0019
MAY 8,83	MAY 7,83	0.37	0.18	0.070	0.030	0.095	0.326	0.0195
MAY 15,83	MAY 14,83	0.35	0.19	0.080	0.065	0.085	1.070	0.0282
MAY 20,83	MAY 19,83	0.11	0.08	0.030	0.020	0.035	0.202	0.0224
MAY 23,83	MAY 22,83	0.09	0.18	0.025	0.035	0.045	0.560	0.0708
MAY 26,83	MAY 25,83	0.23	0.14	0.040	0.050	0.055	0.400	U 0.0513
MAY 30,83	MAY 29,83	0.25	D 0.16	0.055	D 0.055	0.075	D 0.610	0.0589
MAY 31,83	MAY 30,83	******	******	******	******	******	******	G 0.0055
JUN 1,83	MAY 31,83	0.19	0.14	0.035	0.045	0.045	0.360	0.0263
JUN 4,83	JUN 3,83	0.13	0.10	0.035	0.035	0.040	0.126	0.0617
JUN 5,83	JUN 4,83	0.22	0.12	0.045	0.095	0.125	0.352	0.0575
JUN 6,83	JUN 5,83	0.14	0.22	0.040	0.095	0.140	0.242	G 0.0078
JUN 7,83	JUN 6,83	0.07	0.10	0.025	0.055	0.095	0.036	G 0.0015
JUN 10,83	JUN 9,83	******	******	******	******	******	******	0.0170
JUN 28,83	JUN 27,83	0.15	0.07	0.030	0.015	0.020	0.290	0.0513
JUL 1,83	JUN 30,83	0.29	0.21	0.075	0.020	0.065	0.120	0.0955
JUL 5,83	JUL 4,83	0.25	0.15	0.045	0.040	0.075	0.246	0.0138
JUL 29,83	JUL 28,83	0.26	0.11	0.050	0.030	0.045	0.236	0.0347
JUL 30,83	JUL 29,83	0.68	0.27	0.095	0.060	0.105	0.370	0.0676
JUL 31,83	JUL 30,83	<T 0.02	0.06	0.015	0.025	0.015	0.154	0.0355
AUG 1,83	JUL 31,83	0.15	0.13	0.040	0.035	0.035	0.610	0.0631
AUG 4,83	AUG 3,83	0.22	0.16	0.055	0.040	0.055	0.206	0.0562
AUG 5,83	AUG 4,83	0.35	0.15	0.085	0.045	0.040	1.110	******
AUG 9,83	AUG 8,83	1.08	0.18	0.185	0.070	0.030	0.720	U 0.0001
AUG 11,83	AUG 10,83	0.18	0.21	0.035	0.040	0.055	0.460	0.0525
AUG 12,83	AUG 11,83	0.10	0.10	0.015	0.015	0.020	0.164	0.0525
AUG 18,83	AUG 17,83	U 1.97	0.37	0.300	0.085	0.090	0.990	U 0.1905
AUG 22,83	AUG 21,83	0.25	0.09	0.035	0.025	0.045	0.268	0.0501
AUG 26,83	AUG 25,83	0.21	0.13	0.030	0.050	0.080	0.274	0.0355

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NORTH EASTHOPE/DAILY/AEROCHEM #03

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES		SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
AUG 31,83	AUG 30,83	800	800	830	2000	1	17.1	1	63053	2	1		91		J
SEP 7,83	SEP 6,83	800	800	900	600	1	16.8	1	63054	2	1		88		
SEP 11,83	SEP 10,83	800	800	****	****	1	4.1	1	63055	2	1		83		J
SEP 16,83	SEP 15,83	800	800	100	800	1	3.8	1	63063	2	1		68		
SEP 17,83	SEP 16,83	800	800	800	1700	1	22.2	1	63062	2	1		98		
SEP 19,83	SEP 18,83	800	800	830	1200	1	16.0	1	63061	2	1		100		
SEP 21,83	SEP 20,83	800	800	800	800	1	33.0	1	63060	2	1		103		J
SEP 22,83	SEP 21,83	800	800	200	800	1	1.0	1	63059	2	1		45		N
SEP 23,83	SEP 22,83	800	800	800	600	1	19.9	1	63058	2	1		95		JC
SEP 24,83	SEP 23,83	800	800	1200	1800	1	1.6	1	63057	2	1		54		
SEP 26,83	SEP 25,83	800	800	1800	100	1	1.1	1	63056	2	1		39		NT
OCT 5,83	OCT 4,83	800	800	2000	2100	1	1.7	1	63069	2	1		32		N
OCT 6,83	OCT 5,83	800	800	1600	500	1	4.6	1	63068	2	1		85		J
OCT 7,83	OCT 6,83	800	800	1030	1200	1	1.8	1	63067	2	1		71		
OCT 9,83	OCT 8,83	800	800	****	****	1	7.6	1	63066	2	1		85		
OCT 12,83	OCT 11,83	800	800	2200	800	1	6.8	1	63065	2	1		81		
OCT 13,83	OCT 12,83	800	800	800	600	1	9.0	1	63064	2	1		76		
OCT 14,83	OCT 13,83	800	800	****	****	1	11.0	1	63070	2	1		89	B	J
OCT 15,83	OCT 14,83	800	800	****	****	3	1.0	1	63071	2	1		37	C	N
OCT 17,83	OCT 16,83	800	800	1200	1600	1	3.0	1	63072	2	1		81		HM
OCT 23,83	OCT 22,83	800	800	1300	100	1	22.0	1	63073	2	1		91		JC
OCT 24,83	OCT 23,83	800	800	****	****	4	1.0	1	63074	2	1		15	E	N
OCT 26,83	OCT 25,83	800	800	****	****	1	2.2	1	63075	2	1		73		
NOV 2,83	NOV 1,83	800	800	2200	630	1	8.7	1	63076	2	1		88	C	J
NOV 3,83	NOV 2,83	800	800	****	****	1	10.0	1	63077	2	1		90		J
NOV 4,83	NOV 3,83	800	800	****	****	2	0.2	1	63078	2	1		****	E	
NOV 11,83	NOV 10,83	800	800	100	800	1	13.3	1	63079	2	1		87		
NOV 12,83	NOV 11,83	800	800	****	****	2	4.6	1	63080	2	1	U	53	FC	
NOV 16,83	NOV 15,83	730	730	****	****	3	10.0	1	63081	2	1		85	CD	J
NOV 17,83	NOV 16,83	730	730	****	****	2	4.2	1	63082	2	1		30	CD	N
NOV 20,83	NOV 19,83	800	1000	2100	630	1	1.3	2	63083	2	1		56	CD	
NOV 21,83	NOV 20,83	1000	700	1030	2130	1	5.6	2	63084	2	1		84	C	J
NOV 24,83	NOV 23,83	800	800	****	****	1	7.1	2	63085	2	1	U	23	GD	
NOV 26,83	NOV 25,83	800	1200	800	1400	2	0.6	2	63087	2	1		10	E	N
NOV 28,83	NOV 27,83	800	800	****	****	1	4.2	2	63088	2	1		151		NJ
NOV 29,83	NOV 28,83	800	800	****	****	1	10.4	2	63089	2	1		97	C	JHM
DEC 1,83	NOV 30,83	800	800	800	800	2	8.4	2	63090	2	1		12	C	N
DEC 2,83	DEC 1,83	800	800	****	****	2	****	*	63091	2	1		****	E	
DEC 4,83	DEC 3,83	800	1200	****	****	3	3.2	2	63092	2	1		83		
DEC 6,83	DEC 5,83	800	800	****	****	2	15.8	2	63093	2	1		72		

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NORTH EASTHOPE/DAILY/AEROCHEM #03

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
AUG 31,83	AUG 30,83	1002.0	15.9	4.15	4.80	0.0392	1.80	0.34
SEP 7,83	SEP 6,83	958.0	36.2	3.84	4.26	0.0880	4.35	0.32
SEP 11,83	SEP 10,83	220.0	18.4	4.74	U 6.02	0.0244	3.15	0.62
SEP 16,83	SEP 15,83	166.0	50.5	******	4.06	0.0890	3.70	0.91
SEP 17,83	SEP 16,83	1403.0	31.3	3.93	4.23	0.0754	3.30	0.29
SEP 19,83	SEP 18,83	1032.0	48.2	3.72	4.10	0.0888	4.80	0.52
SEP 21,83	SEP 20,83	2186.0	12.9	4.25	4.76	0.0250	1.20	0.09
SEP 22,83	SEP 21,83	29.0	******	******	4.73	0.0234	1.20	0.41
SEP 23,83	SEP 22,83	1219.0	6.2	4.61	U 5.74	0.0136	0.65	0.09
SEP 24,83	SEP 23,83	56.0	******	******	U 7.34	******	0.40	0.02
SEP 26,83	SEP 25,83	28.0	******	******	4.10	0.0752	5.00	0.72
OCT 5,83	OCT 4,83	35.0	******	******	U 6.96	0.0208	10.00	1.28
OCT 6,83	OCT 5,83	251.0	G 7.3	5.03	U 5.70	0.0230	1.00	0.28
OCT 7,83	OCT 6,83	82.0	******	******	U 7.38	0.0166	1.25	0.14
OCT 9,83	OCT 8,83	418.0	17.0	4.55	4.77	0.0376	2.70	0.40
OCT 12,83	OCT 11,83	355.0	15.5	4.36	4.54	0.0476	1.50	0.24
OCT 13,83	OCT 12,83	444.0	17.0	4.17	4.54	0.0518	1.95	0.22
OCT 14,83	OCT 13,83	634.0	12.5	3.60	4.99	0.0366	2.00	0.21
OCT 15,83	OCT 14,83	24.0	******	******	U 6.69	0.0254	******	******
OCT 17,83	OCT 16,83	157.0	30.1	******	4.38	0.0764	3.90	0.37
OCT 23,83	OCT 22,83	1284.0	10.6	4.20	G 5.17	0.0306	1.30	0.18
OCT 24,83	OCT 23,83	10.0	******	******	******	******	******	******
OCT 26,83	OCT 25,83	103.0	39.5	******	4.19	0.1042	4.05	0.74
NOV 2,83	NOV 1,83	496.0	58.0	U 3.45	U 4.04	0.1490	6.05	1.56
NOV 3,83	NOV 2,83	579.0	26.5	3.72	4.40	0.0738	3.30	0.31
NOV 4,83	NOV 3,83	******	******	******	******	******	******	******
NOV 11,83	NOV 10,83	747.0	17.2	4.27	4.66	0.0424	1.60	0.23
NOV 12,83	NOV 11,83	158.0	4.8	******	U 7.68	0.0132	0.45	<W 0.01
NOV 16,83	NOV 15,83	551.0	17.0	3.86	D 4.60	D 0.0494	0.90	0.48
NOV 17,83	NOV 16,83	82.0	18.4	******	U 5.20	0.0286	1.70	0.56
NOV 20,83	NOV 19,83	47.0	******	******	U 3.85	D 0.1864	D 7.20	2.03
NOV 21,83	NOV 20,83	303.0	27.0	U 3.18	4.44	0.0608	3.00	0.37
NOV 24,83	NOV 23,83	105.0	32.5	******	4.28	0.0760	2.80	0.49
NOV 26,83	NOV 25,83	4.0	******	******	******	******	******	******
NOV 28,83	NOV 27,83	409.0	14.0	3.70	4.76	0.0362	1.20	0.24
NOV 29,83	NOV 28,83	652.0	24.8	U 3.16	4.39	0.0630	3.30	0.35
DEC 1,83	NOV 30,83	66.0	******	******	U 7.95	0.0110	1.25	0.29
DEC 2,83	DEC 1,83	5.0	******	******	******	******	******	******
DEC 4,83	DEC 3,83	172.0	10.5	******	4.97	0.0294	1.50	0.12
DEC 6,83	DEC 5,83	737.0	9.0	******	4.90	0.0312	0.75	0.16

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NORTH EASTHOPE/DAILY/AEROCHEM #03 PAGE : 9

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
AUG 31,83	AUG 30,83	0.16	0.05	0.030	0.025	0.015	0.450	0.0158
SEP 7,83	SEP 6,83	0.18	0.08	0.020	0.035	0.050	0.460	0.0550
SEP 11,83	SEP 10,83	0.92	0.22	0.220	0.075	0.170	0.660	U 0.0010
SEP 16,83	SEP 15,83	0.41	0.50	0.095	0.140	0.225	0.304	0.0871
SEP 17,83	SEP 16,83	0.12	0.06	0.010	0.020	<W 0.005	0.410	0.0589
SEP 19,83	SEP 18,83	0.32	0.16	0.035	0.060	0.060	0.450	0.0794
SEP 21,83	SEP 20,83	0.11	0.04	0.010	0.020	D 0.025	0.096	0.0174
SEP 22,83	SEP 21,83	******	0.24	******	******	******	******	0.0186
SEP 23,83	SEP 22,83	0.15	0.03	0.020	0.025	<T 0.010	0.190	U 0.0018
SEP 24,83	SEP 23,83	******	0.09	******	******	******	******	U 0.0000
SEP 26,83	SEP 25,83	******	0.24	******	******	******	******	0.0794
OCT 5,83	OCT 4,83	******	0.47	******	******	******	******	U 0.0001
OCT 6,83	OCT 5,83	0.22	0.06	0.040	0.030	0.040	0.420	U 0.0020
OCT 7,83	OCT 6,83	0.20	0.14	U 0.360	0.075	0.060	******	U 0.0000
OCT 9,83	OCT 8,83	0.77	0.06	0.075	0.055	0.020	0.380	0.0170
OCT 12,83	OCT 11,83	0.08	0.08	0.005	0.040	0.050	0.196	0.0288
OCT 13,83	OCT 12,83	0.12	0.10	0.020	0.050	0.050	0.258	0.0288
OCT 14,83	OCT 13,83	0.42	0.11	U 0.205	0.090	0.060	0.088	0.0102
OCT 15,83	OCT 14,83	******	******	******	******	******	******	U 0.0002
OCT 17,83	OCT 16,83	0.37	0.28	0.075	0.055	0.080	0.224	0.0417
OCT 23,83	OCT 22,83	0.24	0.09	0.080	0.050	0.120	0.096	G 0.0068
OCT 24,83	OCT 23,83	******	******	******	******	******	******	******
OCT 26,83	OCT 25,83	0.16	0.27	0.030	0.050	0.070	0.530	0.0646
NOV 2,83	NOV 1,83	0.37	0.30	D 0.090	0.145	0.250	U 1.270	U 0.0912
NOV 3,83	NOV 2,83	0.10	0.10	0.010	0.075	0.100	0.380	0.0398
NOV 4,83	NOV 3,83	******	******	******	******	******	******	******
NOV 11,83	NOV 10,83	0.05	0.07	0.010	<T 0.015	0.020	0.236	0.0219
NOV 12,83	NOV 11,83	******	0.07	******	******	******	0.126	U 0.0000
NOV 16,83	NOV 15,83	0.10	0.10	0.025	0.030	0.035	0.156	D 0.0251
NOV 17,83	NOV 16,83	******	0.23	******	******	******	0.510	U 0.0063
NOV 20,83	NOV 19,83	******	U 1.50	******	******	******	******	U 0.1413
NOV 21,83	NOV 20,83	0.29	0.51	0.035	U 0.250	0.370	0.288	0.0363
NOV 24,83	NOV 23,83	0.26	0.26	0.030	0.035	0.080	0.196	0.0525
NOV 26,83	NOV 25,83	******	******	******	******	******	******	******
NOV 28,83	NOV 27,83	0.19	0.10	0.015	0.025	<T 0.010	D 0.142	0.0174
NOV 29,83	NOV 28,83	0.06	0.16	0.010	0.025	0.015	0.184	0.0407
DEC 1,83	NOV 30,83	******	0.27	******	******	******	******	U 0.0000
DEC 2,83	DEC 1,83	******	******	******	******	******	******	******
DEC 4,83	DEC 3,83	0.10	0.07	0.020	0.020	0.030	0.238	0.0107
DEC 6,83	DEC 5,83	0.05	0.08	0.010	<T 0.015	0.025	0.130	0.0126

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NORTH EASTHOPE/DAILY/AEROCHEM #03 PAGE : 10

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
DEC 7,83	DEC 6,83	800	800	****	****	3	29.8	2	63094	2	1	U 4	CDFI	NH
DEC 10,83	DEC 9,83	800	800	****	****	2	0.8	2	63095	2	1	****	EIK	
DEC 13,83	DEC 12,83	800	800	2000	800	1	3.6	2	63096	2	1	408	C	N
DEC 14,83	DEC 13,83	800	800	800	1000	1	2.8	2	63097	2	1	120	CD	N
DEC 17,83	DEC 16,83	800	800	1200	800	2	5.4	2	63098	2	1	****	EIK	
DEC 18,83	DEC 17,83	800	800	800	800	2	****	2	63099	2	1	****	ID	
DEC 19,83	DEC 18,83	800	800	****	****	2	2.0	2	63100	2	1	****	EIK	
DEC 22,83	DEC 21,83	800	800	****	****	3	1.6	2	63101	2	1	36		N
DEC 25,83	DEC 24,83	800	800	****	****	2	23.4	2	63102	2	1	****	EIK	
DEC 26,83	DEC 25,83	800	800	****	****	2	0.6	2	63103	2	1	574	CD	N

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NORTH EASTHOPE/DAILY/AEROCHEM #03

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
DEC 7,83	DEC 6,83	84.0	******	******	U 5.05	0.0280	0.95	0.22
DEC 10,83	DEC 9,83	******	******	******	******	******	******	******
DEC 13,83	DEC 12,83	943.0	31.1	******	4.21	0.0876	2.65	0.52
DEC 14,83	DEC 13,83	217.0	25.1	******	4.31	0.0736	2.20	0.48
DEC 17,83	DEC 16,83	******	******	******	******	******	******	******
DEC 18,83	DEC 17,83	105.0	39.7	******	4.12	0.0982	3.60	0.66
DEC 19,83	DEC 18,83	******	******	******	******	******	******	******
DEC 22,83	DEC 21,83	37.0	******	******	4.18	D 0.0894	5.00	D 1.15
DEC 25,83	DEC 24,83	******	******	******	******	******	******	******
DEC 26,83	DEC 25,83	221.0	8.0	******	G 5.22	0.0226	0.60	0.24

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NORTH EASTHOPE/DAILY/AEROCHEM #03 PAGE : 12

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
DEC 7,83	DEC 6,83	0.11	U 0.32	0.025	U 0.035	U 0.215	U 0.152	U 0.0089
DEC 10,83	DEC 9,83	******	******	******	******	******	******	******
DEC 13,83	DEC 12,83	0.07	0.21	0.015	0.035	0.055	0.228	0.0617
DEC 14,83	DEC 13,83	0.14	0.09	0.015	0.020	0.035	0.164	0.0490
DEC 17,83	DEC 16,83	******	******	******	******	******	******	******
DEC 18,83	DEC 17,83	******	0.28	******	******	******	0.500	0.0759
DEC 19,83	DEC 18,83	******	******	******	******	******	******	******
DEC 22,83	DEC 21,83	******	U 1.44	******	******	******	******	0.0661
DEC 25,83	DEC 24,83	******	******	******	******	******	******	******
DEC 26,83	DEC 25,83	0.26	0.16	0.060	0.025	0.080	0.106	G 0.0060

PART IV

CENTRAL REGION

DAILY PRECIPITATION CHEMISTRY LISTINGS

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WELLESLEY/DAILY/AEROCHEM #04 PAGE : 1

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
JAN 7,83	JAN 6,83	530	530	2000	500	3	4.4	2	18830	2	1	57	C	H
JAN 11,83	JAN 10,83	530	530	830	200	1	21.2	2	18831	2	1	92		HM
JAN 12,83	JAN 11,83	530	530	800	2130	3	****	2	18832	2	1	****		
JAN 15,83	JAN 14,83	530	530	****	****	2	7.8	2	18833	2	1	U 27	HL	NHCM
JAN 23,83	JAN 22,83	530	1130	2200	300	3	1.0	2	18834	2	1	U 24	CL	N
JAN 25,83	JAN 24,83	530	530	****	****	2	1.3	2	18836	2	1	****	EK	
JAN 26,83	JAN 25,83	530	530	****	****	2	2.9	2	18837	2	1	****	EK	
JAN 30,83	JAN 29,83	530	1200	200	1200	1	3.3	2	18838	2	1	100		
JAN 31,83	JAN 30,83	1200	530	****	****	3	5.9	2	18839	2	1	15	D	N
FEB 2,83	FEB 1,83	530	1200	****	****	1	0.5	2	18840	2	1	37		N
FEB 3,83	FEB 2,83	1200	530	1200	530	2	18.7	2	18841	2	1	101		
FEB 5,83	FEB 4,83	530	530	****	****	2	2.8	2	18842	2	1	32	CD	N
FEB 7,83	FEB 6,83	530	530	2100	400	2	4.5	2	18843	2	1	21	D	N
FEB 15,83	FEB 14,83	530	530	200	500	1	0.3	2	18844	2	1	88	ACD	
FEB 17,83	FEB 16,83	530	530	****	****	1	0.9	2	18846	2	1	81	CD	
FEB 19,83	FEB 18,83	530	530	****	****	2	1.3	2	18847	2	1	31	D	N
FEB 23,83	FEB 22,83	530	530	1700	300	1	7.6	2	18848	2	1	100		
FEB 25,83	FEB 24,83	530	530	1630	200	2	0.4	2	18849	2	1	54	C	
MAR 4,83	MAR 3,83	530	530	1600	1800	1	0.7	2	18850	2	1	60	D	
MAR 7,83	MAR 6,83	1100	530	1530	1830	1	1.8	2	18852	2	1	133		N
MAR 8,83	MAR 7,83	530	530	2030	2400	1	0.9	2	18853	2	1	133	C	N
MAR 9,83	MAR 8,83	530	530	1700	2200	1	1.8	2	18854	2	1	76	C	
MAR 11,83	MAR 10,83	530	530	2000	200	3	1.0	2	18855	2	1	99	D	
MAR 19,83	MAR 18,83	530	530	****	****	1	10.5	2	18857	2	1	97		
MAR 20,83	MAR 19,83	530	800	****	****	3	8.1	2	18858	2	1	81		
MAR 21,83	MAR 20,83	800	530	****	****	2	2.1	2	18859	2	1	220	C	NHM
MAR 22,83	MAR 21,83	530	530	600	1500	2	6.3	2	18860	2	1	****	EFIK	
MAR 23,83	MAR 22,83	530	530	530	1400	2	1.8	2	18861	2	1	****	EFIK	
MAR 27,83	MAR 26,83	530	1100	1800	2130	2	5.2	2	18862	2	1	61	C	H
MAR 28,83	MAR 27,83	1100	530	1100	1200	3	0.6	2	18863	2	1	106		
MAR 29,83	MAR 28,83	530	530	800	1200	3	1.1	2	18864	2	1	120	D	N
APR 3,83	APR 2,83	830	1200	****	****	1	2.3	2	18865	2	1	43	C	N
APR 4,83	APR 3,83	1200	530	****	****	1	2.9	2	18866	2	1	100		
APR 7,83	APR 6,83	530	530	200	530	1	6.9	2	18867	2	1	99		
APR 8,83	APR 7,83	530	830	530	1000	1	1.8	2	18868	2	1	120	A	N
APR 10,83	APR 9,83	830	1200	2000	100	1	27.2	1	18869	2	1	98	C	
APR 11,83	APR 10,83	1200	530	1730	2000	1	0.6	1	18870	2	1	64		
APR 14,83	APR 13,83	530	530	1800	530	1	6.5	1	18871	2	1	89		
APR 15,83	APR 14,83	530	530	530	2300	1	20.2	1	18872	2	1	98		
APR 16,83	APR 15,83	830	1200	1300	1500	3	0.4	1	18873	2	1	62	C	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WELLESLEY/DAILY/AEROCHEM #04 PAGE : 2

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
JAN 7,83	JAN 6,83	162.0	64.0	******	4.01	0.1504	5.95	1.94
JAN 11,83	JAN 10,83	1255.0	23.1	4.33	4.41	0.0668	1.90	0.35
JAN 12,83	JAN 11,83	83.0	20.0	******	4.49	0.0636	1.85	0.55
JAN 15,83	JAN 14,83	139.0	41.2	******	3.84	0.1770	1.90	1.01
JAN 23,83	JAN 22,83	16.0	******	******	4.08	0.1084	******	******
JAN 25,83	JAN 24,83	******	******	******	******	******	******	******
JAN 26,83	JAN 25,83	******	******	******	******	******	******	******
JAN 30,83	JAN 29,83	212.0	33.5	4.19	4.11	0.1126	3.35	0.40
JAN 31,83	JAN 30,83	60.0	******	******	4.07	0.1188	3.65	0.70
FEB 2,83	FEB 1,83	12.0	******	******	******	******	******	******
FEB 3,83	FEB 2,83	1211.0	32.0	4.17	4.14	0.1058	2.60	0.40
FEB 5,83	FEB 4,83	59.0	******	******	3.99	0.1376	1.70	0.90
FEB 7,83	FEB 6,83	61.0	******	******	4.39	0.0680	0.10	0.65
FEB 15,83	FEB 14,83	17.0	******	******	3.98	0.1402	******	******
FEB 17,83	FEB 16,83	47.0	******	******	U 3.66	G 0.2600	5.60	U 2.65
FEB 19,83	FEB 18,83	26.0	******	******	4.35	0.0714	******	******
FEB 23,83	FEB 22,83	492.0	49.6	4.00	4.00	0.1278	3.85	0.68
FEB 25,83	FEB 24,83	14.0	******	******	******	******	******	******
MAR 4,83	MAR 3,83	27.0	******	******	4.05	0.1174	7.80	> 2.00
MAR 7,83	MAR 6,83	154.0	42.0	******	4.14	0.0896	5.40	D 0.55
MAR 8,83	MAR 7,83	77.0	******	******	******	******	8.55	1.45
MAR 9,83	MAR 8,83	88.0	******	******	3.81	0.2000	5.20	1.65
MAR 11,83	MAR 10,83	64.0	******	******	******	******	4.45	1.58
MAR 19,83	MAR 18,83	658.0	15.1	******	4.67	0.0414	1.50	0.31
MAR 20,83	MAR 19,83	425.0	10.4	******	4.86	0.0358	0.85	0.14
MAR 21,83	MAR 20,83	297.0	10.7	******	U 5.37	0.0234	1.85	0.22
MAR 22,83	MAR 21,83	******	******	******	******	******	******	******
MAR 23,83	MAR 22,83	******	******	******	******	******	******	******
MAR 27,83	MAR 26,83	204.0	13.5	******	4.78	0.0392	1.70	0.36
MAR 28,83	MAR 27,83	41.0	******	******	******	******	6.65	1.28
MAR 29,83	MAR 28,83	85.0	******	******	3.85	0.1832	5.30	1.24
APR 3,83	APR 2,83	64.0	******	******	3.98	0.1456	5.05	1.65
APR 4,83	APR 3,83	187.0	******	4.22	4.08	B 0.3060	4.40	0.74
APR 7,83	APR 6,83	442.0	37.7	4.26	4.16	0.0978	3.30	0.39
APR 8,83	APR 7,83	139.0	******	******	4.04	0.1374	4.50	0.78
APR 10,83	APR 9,83	1717.0	20.0	4.70	4.49	0.0590	1.55	0.29
APR 11,83	APR 10,83	25.0	******	******	A 3.89	******	******	******
APR 14,83	APR 13,83	373.0	******	4.09	4.03	0.1476	5.05	0.88
APR 15,83	APR 14,83	1278.0	22.4	4.64	4.43	0.0628	2.10	0.26
APR 16,83	APR 15,83	16.0	******	******	******	******	******	******

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WELLESLEY/DAILY/AEROCHEM #04 PAGE : 3

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
JAN 7,83	JAN 6,83	0.15	0.36	0.025	0.060	0.055	U 1.510	0.0977
JAN 11,83	JAN 10,83	1.09	0.11	0.185	0.070	0.110	0.230	0.0389
JAN 12,83	JAN 11,83	0.04	0.20	0.005	<T 0.010	<T 0.005	0.480	0.0324
JAN 15,83	JAN 14,83	0.23	0.36	0.050	0.020	0.070	0.650	0.1445
JAN 23,83	JAN 22,83	******	******	******	******	******	******	0.0832
JAN 25,83	JAN 24,83	******	******	******	******	******	******	******
JAN 26,83	JAN 25,83	******	******	******	******	******	******	******
JAN 30,83	JAN 29,83	0.09	0.12	0.015	0.020	0.035	0.274	0.0776
JAN 31,83	JAN 30,83	******	0.16	******	******	******	******	0.0851
FEB 2,83	FEB 1,83	******	******	******	******	******	******	******
FEB 3,83	FEB 2,83	0.11	0.16	0.010	0.020	0.040	0.194	0.0724
FEB 5,83	FEB 4,83	******	0.37	******	******	******	******	0.1023
FEB 7,83	FEB 6,83	0.05	0.19	0.055	0.010	0.080	******	0.0407
FEB 15,83	FEB 14,83	******	******	******	******	******	******	0.1047
FEB 17,83	FEB 16,83	******	0.65	******	******	******	******	U 0.2188
FEB 19,83	FEB 18,83	******	******	******	******	******	******	0.0447
FEB 23,83	FEB 22,83	0.07	0.18	0.015	0.025	0.055	0.430	0.1000
FEB 25,83	FEB 24,83	******	******	******	******	******	******	******
MAR 4,83	MAR 3,83	******	******	******	******	******	******	0.0891
MAR 7,83	MAR 6,83	0.53	0.44	0.105	0.085	U 0.575	0.760	0.0724
MAR 8,83	MAR 7,83	******	U 1.36	G 0.455	U 0.300	G 0.710	******	******
MAR 9,83	MAR 8,83	0.52	0.37	0.095	0.075	0.150	******	0.1549
MAR 11,83	MAR 10,83	0.15	0.23	0.035	0.015	0.055	******	******
MAR 19,83	MAR 18,83	0.22	0.19	0.065	0.020	0.130	0.228	0.0214
MAR 20,83	MAR 19,83	0.07	0.03	0.020	<W 0.005	0.010	0.148	0.0138
MAR 21,83	MAR 20,83	0.96	0.06	U 0.310	0.015	0.030	0.154	U 0.0043
MAR 22,83	MAR 21,83	******	******	******	******	******	******	******
MAR 23,83	MAR 22,83	******	******	******	******	******	******	******
MAR 27,83	MAR 26,83	0.60	0.33	0.135	0.025	0.180	0.254	0.0166
MAR 28,83	MAR 27,83	******	0.40	******	******	******	******	******
MAR 29,83	MAR 28,83	0.17	0.28	0.035	0.020	0.075	******	0.1413
APR 3,83	APR 2,83	1.14	0.44	U 0.260	0.060	0.160	******	0.1047
APR 4,83	APR 3,83	0.03	0.18	0.020	0.060	0.130	0.630	0.0832
APR 7,83	APR 6,83	0.18	0.06	0.010	0.040	0.040	0.130	0.0692
APR 8,83	APR 7,83	0.21	0.18	0.015	0.055	0.060	0.600	0.0912
APR 10,83	APR 9,83	0.10	D 0.07	<W 0.005	0.030	D 0.015	0.144	0.0324
APR 11,83	APR 10,83	******	******	******	******	******	******	A 0.1288
APR 14,83	APR 13,83	0.20	0.20	0.030	0.045	0.045	D 0.580	0.0933
APR 15,83	APR 14,83	0.19	0.11	D 0.015	0.035	0.040	0.170	0.0372
APR 16,83	APR 15,83	******	******	******	******	******	******	******

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WELLESLEY/DAILY/AEROCHEM #04

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES		SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
APR 18,83	APR 17,83	1100	530	****	****	2	5.1	2	18874	2	1		45	D	N
APR 27,83	APR 26,83	530	530	2400	400	1	0.6	2	18875	2	1	U	213	CDP	N
APR 29,83	APR 28,83	530	530	****	****	1	10.3	1	18876	2	1		117	C	
APR 30,83	APR 29,83	530	900	2300	900	1	4.1	1	18877	2	1		68	CD	
MAY 1,83	APR 30,83	900	1200	****	****	1	19.4	1	18878	2	1		98		
MAY 2,83	MAY 1,83	1200	530	****	****	1	16.2	1	18879	2	1		99		
MAY 3,83	MAY 2,83	530	530	530	1800	1	22.4	1	18880	2	1		83	C	
MAY 4,83	MAY 3,83	530	530	****	****	1	5.8	1	18881	2	1		85	AC	
MAY 5,83	MAY 4,83	530	530	2000	2300	1	3.7	1	18882	2	1		96	A	
MAY 7,83	MAY 6,83	530	530	1600	1900	1	1.3	1	18883	2	1		69		
MAY 8,83	MAY 7,83	530	1130	1930	2215	1	17.3	1	18884	2	1		96	C	
MAY 15,83	MAY 14,83	530	1030	****	****	1	11.3	1	18885	2	1		99	AC	H
MAY 20,83	MAY 19,83	530	530	1400	2100	1	33.6	1	18886	2	1		98		
MAY 23,83	MAY 22,83	800	1000	1030	1300	1	5.4	1	18887	2	1		91		
MAY 26,83	MAY 25,83	530	1130	****	****	1	6.8	1	18888	2	1		89	D	
MAY 30,83	MAY 29,83	530	530	1300	1600	1	15.0	1	18889	2	1		103		
JUN 1,83	MAY 31,83	530	530	1300	1730	1	13.9	1	18890	2	1		97		
JUN 4,83	JUN 3,83	530	900	1630	100	1	7.7	1	18891	2	1		100		
JUN 5,83	JUN 4,83	900	930	****	****	1	3.0	1	18892	2	1		101		
JUN 7,83	JUN 6,83	530	530	600	1300	1	12.8	1	18893	2	1		102		HC
JUN 28,83	JUN 27,83	530	930	1500	830	1	31.5	1	18896	2	1		101		
JUL 1,83	JUN 30,83	530	930	****	****	1	3.1	1	18897	2	1		92		
JUL 5,83	JUL 4,83	530	530	1630	2100	1	25.8	1	18898	2	1		103		
JUL 18,83	JUL 17,83	530	530	1630	1830	1	12.1	1	18899	2	1		94		J
JUL 22,83	JUL 21,83	530	530	1515	1530	1	1.3	1	18900	2	1		49		N
JUL 29,83	JUL 28,83	530	530	2100	530	1	37.0	1	18902	2	1		105		J
JUL 30,83	JUL 29,83	530	530	530	1000	1	7.6	1	18903	2	1		88		J
JUL 31,83	JUL 30,83	830	1130	200	600	1	20.5	1	18904	2	1		103		JM
AUG 1,83	JUL 31,83	1130	1130	300	530	1	8.2	1	18905	2	1		97	C	
AUG 4,83	AUG 3,83	530	530	2300	530	1	9.8	1	18906	2	1		99	A	M
AUG 5,83	AUG 4,83	530	800	530	1900	1	2.6	1	18907	2	1		88		
AUG 12,83	AUG 6,83	530	530	100	400	1	19.3	1	18908	2	1	U	246	ACP	NY6
AUG 18,83	AUG 17,83	530	530	1630	1730	1	1.1	1	18912	2	1		69		
AUG 22,83	AUG 21,83	530	530	300	530	1	17.0	1	18913	2	1		35		NJ
AUG 23,83	AUG 22,83	530	530	530	700	1	1.2	1	18911	2	1		36		N
AUG 31,83	AUG 30,83	530	530	800	930	1	23.8	1	18915	2	1		94		JC
SEP 7,83	SEP 6,83	530	530	800	930	1	10.5	1	18916	2	1		90		J
SEP 10,83	SEP 9,83	530	530	2330	220	1	5.9	1	18917	2	1		89	A	J
SEP 16,83	SEP 15,83	530	530	100	530	1	2.0	1	18909	2	1		38		N
SEP 17,83	SEP 16,83	530	830	530	900	1	23.1	1	18922	2	1		97		T

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WELLESLEY/DAILY/AEROCHEM #04 PAGE : 5

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
APR 18,83	APR 17,83	149.0	******	******	4.67	0.1330	1.15	0.46
APR 27,83	APR 26,83	82.0	******	******	******	******	5.55	0.70
APR 29,83	APR 28,83	773.0	29.9	4.33	4.41	0.0688	3.40	0.54
APR 30,83	APR 29,83	179.0	******	4.35	4.47	0.1870	3.45	0.53
MAY 1,83	APR 30,83	1219.0	18.4	4.47	4.58	0.0508	1.65	0.19
MAY 2,83	MAY 1,83	1036.0	19.8	4.25	4.38	0.0646	2.10	0.22
MAY 3,83	MAY 2,83	1204.0	21.6	4.45	4.56	0.0508	2.80	D 0.40
MAY 4,83	MAY 3,83	317.0	21.4	4.36	4.40	0.0624	2.50	0.16
MAY 5,83	MAY 4,83	228.0	******	4.50	4.54	0.0618	3.30	1.19
MAY 7,83	MAY 6,83	58.0	******	******	U 6.33	0.0268	8.55	0.96
MAY 8,83	MAY 7,83	1073.0	18.9	4.54	4.73	0.0458	2.70	0.27
MAY 15,83	MAY 14,83	723.0	18.0	4.54	4.91	0.0392	2.80	0.30
MAY 20,83	MAY 19,83	2124.0	14.9	4.40	4.63	0.0454	1.60	0.10
MAY 23,83	MAY 22,83	317.0	38.5	3.94	4.13	0.1068	3.10	0.31
MAY 26,83	MAY 25,83	389.0	37.1	4.00	4.20	0.0910	3.55	0.50
MAY 30,83	MAY 29,83	993.0	32.1	4.29	4.28	0.0804	2.90	0.39
JUN 1,83	MAY 31,83	872.0	15.4	4.59	4.73	0.0410	1.70	0.21
JUN 4,83	JUN 3,83	494.0	43.7	3.96	4.08	0.1282	3.75	0.49
JUN 5,83	JUN 4,83	196.0	34.0	4.11	4.22	0.0962	3.05	0.36
JUN 7,83	JUN 6,83	844.0	4.8	G 5.05	G 5.58	0.0242	0.45	0.06
JUN 28,83	JUN 27,83	2057.0	******	******	******	******	******	******
JUL 1,83	JUN 30,83	183.0	******	3.91	4.01	0.1320	4.80	0.60
JUL 5,83	JUL 4,83	1718.0	13.8	4.53	4.77	0.0396	1.90	0.18
JUL 18,83	JUL 17,83	735.0	19.4	4.36	4.94	0.0380	2.95	0.41
JUL 22,83	JUL 21,83	41.0	******	******	U 7.21	0.0200	3.35	0.78
JUL 29,83	JUL 28,83	2493.0	35.0	3.91	4.40	0.0802	4.10	0.45
JUL 30,83	JUL 29,83	432.0	26.7	4.03	4.50	0.0650	2.70	0.47
JUL 31,83	JUL 30,83	1360.0	24.2	3.92	4.45	0.0670	2.15	0.22
AUG 1,83	JUL 31,83	512.0	38.8	3.92	4.31	0.0902	4.10	0.50
AUG 4,83	AUG 3,83	628.0	40.5	3.84	4.25	0.0980	3.50	0.52
AUG 5,83	AUG 4,83	148.0	60.0	******	4.17	0.1312	6.85	0.83
AUG 12,83	AUG 6,83	3050.0	30.0	3.97	4.37	0.0786	2.60	0.34
AUG 18,83	AUG 17,83	49.0	******	******	U 3.60	G 0.3440	U 17.20	1.96
AUG 22,83	AUG 21,83	389.0	26.8	3.88	4.37	0.0704	2.90	0.38
AUG 23,83	AUG 22,83	28.0	******	******	4.04	0.1404	7.30	1.50
AUG 31,83	AUG 30,83	1438.0	18.2	4.33	4.88	0.0376	1.55	0.29
SEP 7,83	SEP 6,83	609.0	35.5	3.69	4.23	0.0924	4.20	0.34
SEP 10,83	SEP 9,83	340.0	24.5	4.15	4.81	0.0444	3.75	0.69
SEP 16,83	SEP 15,83	49.0	******	******	3.88	D 0.1854	D 6.50	D 1.90
SEP 17,83	SEP 16,83	1449.0	31.0	3.91	4.24	0.0558	2.95	0.29

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WELLESLEY/DAILY/AEROCHEM #04 PAGE : 6

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
APR 18,83	APR 17,83	0.19	0.03	0.040	0.020	0.035	0.356	0.0214
APR 27,83	APR 26,83	U 3.25	0.25	U 0.555	0.100	0.115	******	******
APR 29,83	APR 28,83	0.43	0.12	0.100	0.020	0.065	0.590	0.0389
APR 30,83	APR 29,83	0.50	0.13	0.120	0.035	0.245	0.570	0.0339
MAY 1,83	APR 30,83	0.02	0.02	0.020	0.010	0.030	0.224	0.0263
MAY 2,83	MAY 1,83	0.11	0.05	0.020	0.035	0.030	0.180	0.0417
MAY 3,83	MAY 2,83	0.48	0.20	0.075	0.070	0.125	0.490	0.0275
MAY 4,83	MAY 3,83	0.14	0.03	0.025	0.030	0.015	U 0.258	0.0398
MAY 5,83	MAY 4,83	0.91	0.24	0.175	0.055	0.075	0.950	0.0288
MAY 7,83	MAY 6,83	U 2.00	0.45	U 0.505	0.085	0.135	******	U 0.0005
MAY 8,83	MAY 7,83	0.35	0.13	0.065	0.035	0.085	0.440	0.0186
MAY 15,83	MAY 14,83	0.37	0.13	0.085	0.045	0.055	0.710	0.0123
MAY 20,83	MAY 19,83	0.08	0.05	0.020	0.015	0.040	0.240	0.0234
MAY 23,83	MAY 22,83	0.09	0.21	0.030	0.030	0.040	0.156	0.0741
MAY 26,83	MAY 25,83	0.30	0.12	0.050	0.025	0.030	U 0.570	0.0631
MAY 30,83	MAY 29,83	0.28	0.11	0.065	0.035	0.040	0.330	0.0525
JUN 1,83	MAY 31,83	0.25	0.07	0.035	0.020	0.030	0.350	0.0186
JUN 4,83	JUN 3,83	0.21	0.12	0.050	0.060	D 0.095	0.260	0.0832
JUN 5,83	JUN 4,83	0.16	0.13	0.040	<T 0.010	0.045	0.284	0.0603
JUN 7,83	JUN 6,83	0.10	0.05	0.025	<T 0.010	0.030	0.160	G 0.0026
JUN 28,83	JUN 27,83	******	******	******	******	******	******	******
JUL 1,83	JUN 30,83	0.44	0.22	0.080	0.020	0.040	0.066	0.0977
JUL 5,83	JUL 4,83	0.22	0.14	0.040	0.025	0.065	0.230	0.0170
JUL 18,83	JUL 17,83	0.68	0.20	0.135	0.035	0.055	0.480	0.0115
JUL 22,83	JUL 21,83	******	0.60	******	******	******	******	U 0.0001
JUL 29,83	JUL 28,83	0.48	0.17	0.080	0.025	0.055	0.390	0.0398
JUL 30,83	JUL 29,83	0.57	0.21	0.080	0.040	0.090	0.194	0.0316
JUL 31,83	JUL 30,83	0.08	0.09	<W 0.005	<W 0.005	<W 0.005	0.094	0.0355
AUG 1,83	JUL 31,83	0.14	0.14	0.035	0.020	<T 0.010	0.700	0.0490
AUG 4,83	AUG 3,83	0.25	0.16	0.040	0.020	0.015	0.230	0.0562
AUG 5,83	AUG 4,83	0.39	0.20	0.090	0.035	0.030	1.190	0.0676
AUG 12,83	AUG 6,83	0.15	0.14	0.025	<W 0.005	0.010	0.214	0.0427
AUG 18,83	AUG 17,83	******	0.39	******	******	******	0.880	U 0.2512
AUG 22,83	AUG 21,83	0.24	0.10	0.025	0.015	0.050	0.288	0.0427
AUG 23,83	AUG 22,83	******	0.30	******	******	******	******	0.0912
AUG 31,83	AUG 30,83	0.19	0.06	0.030	0.020	0.030	0.400	0.0132
SEP 7,83	SEP 6,83	0.20	0.08	0.025	0.030	0.035	0.420	0.0589
SEP 10,83	SEP 9,83	0.86	0.22	0.195	0.060	0.135	0.650	0.0155
SEP 16,83	SEP 15,83	******	0.66	******	******	******	0.610	0.1318
SEP 17,83	SEP 16,83	0.06	0.08	0.010	0.030	<T 0.005	0.344	0.0575

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WELLESLEY/DAILY/AEROCHEM #04 PAGE : 7

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICIENCY (%)		COMMENTS FIELD	COMMENTS OFFICE
SEP 18,83	SEP 17,83	830	1200	830	1000	1	16.8	1	18921	2	1	98			
SEP 21,83	SEP 20,83	530	530	****	****	1	21.4	1	18920	2	1	99			
SEP 23,83	SEP 22,83	530	530	530	1000	1	16.3	1	18919	2	1	90			JC
SEP 24,83	SEP 23,83	530	830	****	****	1	7.2	1	18918	2	1	86			JHCM
SEP 26,83	SEP 25,83	530	530	****	****	1	1.3	1	18930	2	1	45			N
OCT 5,83	OCT 4,83	530	530	700	800	1	1.6	1	18929	2	1	96			
OCT 6,83	OCT 5,83	530	530	1100	1300	1	4.6	1	18928	2	1	92			H
OCT 7,83	OCT 6,83	530	530	****	****	1	5.7	1	18927	2	1	87			JH
OCT 9,83	OCT 8,83	530	530	1900	300	1	8.4	1	18926	2	1	85			
OCT 12,83	OCT 11,83	530	530	200	530	1	3.6	1	18925	2	1	84			
OCT 13,83	OCT 12,83	530	530	530	1500	1	15.3	1	18924	2	1	92			
OCT 14,83	OCT 13,83	530	530	530	1630	1	15.0	1	18923	2	1	117			
OCT 15,83	OCT 14,83	530	830	****	****	1	1.3	1	18931	2	1	51		C	
OCT 17,83	OCT 16,83	1130	530	2130	200	1	2.1	1	18932	2	1	92			
OCT 23,83	OCT 22,83	530	1200	1300	200	1	22.6	1	18933	2	1	95			JHM
OCT 26,83	OCT 25,83	530	530	1200	1500	1	1.8	1	18934	2	1	57			
NOV 2,83	NOV 1,83	530	530	100	530	1	5.5	1	18935	2	1	94			J
NOV 3,83	NOV 2,83	530	530	1300	2200	1	7.4	1	18936	2	1	94			J
NOV 11,83	NOV 10,83	530	830	2200	830	1	13.3	2	18938	2	1	95			J
NOV 12,83	NOV 11,83	830	1100	530	830	1	2.2	2	18939	2	1	65		C	HM
NOV 16,83	NOV 15,83	530	530	****	****	3	7.6	2	18940	2	1	86			J
NOV 17,83	NOV 16,83	530	530	1100	1500	3	2.3	2	18941	2	1	57		CD	HM
NOV 20,83	NOV 19,83	530	1200	****	****	1	1.9	2	18942	2	1	62		CD	
NOV 22,83	NOV 21,83	1200	530	1200	1700	1	4.3	2	18943	2	1	113		C	J
NOV 24,83	NOV 23,83	530	530	1100	1600	1	5.4	2	18944	2	1	97		C	J
NOV 28,83	NOV 27,83	1130	530	****	530	3	4.3	2	18947	2	1	87			JHM
NOV 29,83	NOV 28,83	530	530	530	1100	3	10.5	2	18948	2	1	97			JM
NOV 30,83	NOV 29,83	530	530	1530	530	2	2.7	2	18949	2	1	34		CD	N
DEC 1,83	NOV 30,83	530	530	****	****	2	7.1	2	18950	2	1	22			NHM
DEC 2,83	DEC 1,83	530	530	****	****	2	1.2	2	18951	2	1	3			N
DEC 4,83	DEC 3,83	830	1145	200	1000	3	3.1	2	18952	2	1	76			
DEC 6,83	DEC 5,83	530	530	2200	530	3	12.9	2	18953	2	1	74			M
DEC 7,83	DEC 6,83	530	530	530	1630	3	51.9	2	18954	2	1	47		CQ	N
DEC 8,83	DEC 7,83	530	530	530	900	2	3.0	2	18955	2	1	7			N
DEC 12,83	DEC 11,83	530	530	1300	530	3	14.4	2	18956	2	1	88			
DEC 13,83	DEC 12,83	530	530	****	****	3	6.1	2	18957	2	1	70		CD	
DEC 15,83	DEC 14,83	530	530	****	****	2	****	2	18958	2	1	****			
DEC 17,83	DEC 16,83	530	1000	2200	400	2	3.4	2	18959	2	1	21		D	N
DEC 18,83	DEC 17,83	1000	1130	2000	1000	2	2.1	2	18960	2	1	****		E	
DEC 19,83	DEC 18,83	1130	530	****	****	2	1.9	2	18961	2	1	U	12	I	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WELLESLEY/DAILY/AEROCHEM #04

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD		PH LAB		TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L		NITRATE AS N MG/L
SEP 18,83	SEP 17,83	1060.0	53.9	3.66		4.02		0.1002	5.40		0.53
SEP 21,83	SEP 20,83	1360.0	13.3	4.26		4.72		0.0226	1.25		0.12
SEP 23,83	SEP 22,83	941.0	7.7	4.63		G 5.60		0.0142	0.70		0.12
SEP 24,83	SEP 23,83	399.0	2.5	G 4.98		U 6.74		0.0088	0.10	<W	0.01
SEP 26,83	SEP 25,83	38.0	******	******		3.94		0.1540	7.05		1.00
OCT 5,83	OCT 4,83	99.0	27.5	******		U 6.87		0.0190	5.90		0.94
OCT 6,83	OCT 5,83	274.0	8.0	4.64		G 5.18		0.0266	0.85		0.22
OCT 7,83	OCT 6,83	320.0	7.5	G 4.84		G 5.54		0.0250	1.20		0.14
OCT 9,83	OCT 8,83	462.0	18.0	4.46		4.70		0.0392	2.95		0.41
OCT 12,83	OCT 11,83	196.0	******	4.29		4.41		0.0558	1.95		0.22
OCT 13,83	OCT 12,83	903.0	18.5	4.29		4.48		0.0564	2.00		0.25
OCT 14,83	OCT 13,83	1132.0	10.5	4.31		4.67		0.0408	1.30		0.13
OCT 15,83	OCT 14,83	43.0	******	******		4.30		0.0914	4.00		0.30
OCT 17,83	OCT 16,83	125.0	38.0	******		4.15		0.1162	4.30		0.35
OCT 23,83	OCT 22,83	1377.0	16.0	3.71		4.67		0.2006	1.55		0.22
OCT 26,83	OCT 25,83	66.0	******	******		4.03		0.1452	4.20		0.73
NOV 2,83	NOV 1,83	334.0	45.9	3.49		4.11		0.1274	4.25		1.15
NOV 3,83	NOV 2,83	448.0	31.5	3.58		4.24		0.0970	3.60		0.40
NOV 11,83	NOV 10,83	813.0	16.3	3.40		4.59		0.0480	1.30		0.20
NOV 12,83	NOV 11,83	93.0	******	******		G 6.52		0.0152	0.45	<W	0.01
NOV 16,83	NOV 15,83	420.0	21.3	3.29		4.40		0.0600	0.85		0.46
NOV 17,83	NOV 16,83	85.0	******	******		4.25		******	2.05		0.57
NOV 20,83	NOV 19,83	76.0	******	******		4.24		0.0858	4.00		0.08
NOV 22,83	NOV 21,83	313.0	29.5	3.19		4.22		0.0830	2.80		0.45
NOV 24,83	NOV 23,83	337.0	28.8	3.20		4.20		0.0884	2.75		0.36
NOV 28,83	NOV 27,83	241.0	11.4	3.67		4.81		0.0356	1.00		0.16
NOV 29,83	NOV 28,83	654.0	23.5	3.31		4.33		0.0720	2.10		0.36
NOV 30,83	NOV 29,83	60.0	******	******		4.60		0.0444	1.50		0.42
DEC 1,83	NOV 30,83	104.0	8.5	******		G 6.64		0.0138	0.80		0.38
DEC 2,83	DEC 1,83	3.0	******	******		******		******	******		******
DEC 4,83	DEC 3,83	152.0	11.2	******		4.68		0.0400	1.10		0.10
DEC 6,83	DEC 5,83	615.0	8.5	******		4.98		0.0296	0.70		0.14
DEC 7,83	DEC 6,83	1566.0	16.5	******		4.48		0.0522	1.75		0.10
DEC 8,83	DEC 7,83	14.0	******	******		U 7.04		0.0148	******		******
DEC 12,83	DEC 11,83	813.0	34.4	******		4.16		0.0976	2.90		0.57
DEC 13,83	DEC 12,83	276.0	21.9	******		4.37		0.0646	1.70		0.42
DEC 15,83	DEC 14,83	116.0	47.6	******		4.06		0.1340	4.45		0.82
DEC 17,83	DEC 16,83	46.0	******	******		G 5.95		0.0152	1.00		0.49
DEC 18,83	DEC 17,83	******	******	******		******		******	******		******
DEC 19,83	DEC 18,83	15.0	******	******		******		******	******		******

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WELLESLEY/DAILY/AEROCHEM #04 PAGE : 9

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
SEP 18,83	SEP 17,83	0.26	0.13	0.020	0.025	0.030	0.460	0.0955
SEP 21,83	SEP 20,83	0.14	<T 0.01	0.010	<T 0.010	<W 0.005	D 0.148	0.0191
SEP 23,83	SEP 22,83	0.16	0.03	0.020	<W 0.005	<W 0.005	0.206	G 0.0025
SEP 24,83	SEP 23,83	0.08	<W 0.01	<W 0.005	<W 0.005	<W 0.005	0.062	U 0.0002
SEP 26,83	SEP 25,83	******	0.26	******	******	******	******	0.1148
OCT 5,83	OCT 4,83	U 2.70	0.32	U 0.700	0.185	0.120	******	U 0.0001
OCT 6,83	OCT 5,83	0.08	<W 0.01	0.005	<T 0.010	<T 0.005	0.380	G 0.0066
OCT 7,83	OCT 6,83	0.08	<W 0.01	0.005	0.020	<T 0.005	0.480	G 0.0029
OCT 9,83	OCT 8,83	0.76	0.05	0.075	0.050	0.025	0.430	0.0200
OCT 12,83	OCT 11,83	0.08	0.07	<T 0.005	<T 0.015	0.070	0.226	0.0389
OCT 13,83	OCT 12,83	0.05	0.05	<W 0.005	<T 0.010	0.020	0.280	0.0331
OCT 14,83	OCT 13,83	0.09	0.02	0.005	<T 0.015	<T 0.010	0.158	0.0214
OCT 15,83	OCT 14,83	******	0.30	******	******	******	******	0.0501
OCT 17,83	OCT 16,83	0.36	0.19	0.070	<T 0.015	0.060	0.044	0.0708
OCT 23,83	OCT 22,83	0.08	0.20	0.020	0.015	0.035	0.156	0.0214
OCT 26,83	OCT 25,83	******	0.28	******	******	******	******	0.0933
NOV 2,83	NOV 1,83	0.31	0.07	0.055	0.090	0.105	0.700	0.0776
NOV 3,83	NOV 2,83	0.09	<W 0.01	0.015	0.040	0.085	0.348	0.0575
NOV 11,83	NOV 10,83	0.04	0.08	0.010	<T 0.010	<T 0.010	0.144	0.0257
NOV 12,83	NOV 11,83	0.06	0.05	0.010	<W 0.005	0.060	0.102	G 0.0003
NOV 16,83	NOV 15,83	0.05	0.10	0.005	<W 0.005	<T 0.005	0.074	0.0398
NOV 17,83	NOV 16,83	0.14	0.29	0.025	U 0.260	U 0.175	0.710	0.0562
NOV 20,83	NOV 19,83	0.65	0.34	0.090	0.025	0.170	0.054	0.0575
NOV 22,83	NOV 21,83	0.22	0.27	0.025	0.020	0.175	0.168	0.0603
NOV 24,83	NOV 23,83	0.31	0.23	0.035	<T 0.015	0.095	0.092	0.0631
NOV 28,83	NOV 27,83	<W 0.01	0.05	0.015	<T 0.005	<T 0.005	0.034	0.0155
NOV 29,83	NOV 28,83	<W 0.01	0.10	0.010	<T 0.015	<T 0.005	0.136	0.0468
NOV 30,83	NOV 29,83	******	0.14	******	******	******	******	0.0251
DEC 1,83	NOV 30,83	0.67	0.15	0.150	<T 0.010	0.035	0.010	G 0.0002
DEC 2,83	DEC 1,83	******	******	******	******	******	******	******
DEC 4,83	DEC 3,83	0.09	0.06	0.015	<W 0.005	0.015	<W 0.002	0.0209
DEC 6,83	DEC 5,83	0.03	0.05	<T 0.005	<T 0.005	0.020	0.100	0.0105
DEC 7,83	DEC 6,83	0.02	0.04	0.005	<T 0.005	<T 0.010	0.058	0.0331
DEC 8,83	DEC 7,83	******	******	******	******	******	******	U 0.0001
DEC 12,83	DEC 11,83	0.06	0.25	0.010	<T 0.010	0.030	D 0.262	0.0692
DEC 13,83	DEC 12,83	0.11	0.08	0.015	0.030	0.030	0.102	0.0427
DEC 15,83	DEC 14,83	0.13	0.35	0.020	0.030	0.025	0.640	0.0871
DEC 17,83	DEC 16,83	******	0.22	******	******	******	******	G 0.0011
DEC 18,83	DEC 17,83	******	******	******	******	******	******	******
DEC 19,83	DEC 18,83	******	******	******	******	******	******	******

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WELLESLEY/DAILY/AEROCHEM #04 PAGE : 10

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES		SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
DEC 22,83	DEC 21,83	530	1200	****	****	3	23.1	2	18962	2	1		59	C	
DEC 24,83	DEC 23,83	530	1200	****	****	2	2.1	2	18963	2	1		****	EIK	
DEC 25,83	DEC 24,83	1200	1400	****	****	2	14.5	2	18964	2	1		39	C	NC
DEC 26,83	DEC 25,83	1400	1000	1400	2000	2	10.7	2	18965	2	1	U	4	I	
DEC 29,83	DEC 28,83	530	530	****	****	2	13.9	2	18966	2	1		49		N

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WELLESLEY/DAILY/AEROCHEM #04 PAGE : 11

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD		PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
DEC 22,83	DEC 21,83	880.0	23.5	******		4.37	0.0654	1.65	0.41
DEC 24,83	DEC 23,83	******	******	******		******	******	******	******
DEC 25,83	DEC 24,83	368.0	4.8	******	G	5.58	0.0172	0.20	0.05
DEC 26,83	DEC 25,83	29.0	******	******	G	5.84	0.0160	******	******
DEC 29,83	DEC 28,83	442.0	12.9	******		4.63	0.0434	0.35	0.36

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WELLESLEY/DAILY/AEROCHEM #04 PAGE : 12

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
DEC 22,83	DEC 21,83	0.07	0.11	0.020	<W 0.005	0.070	0.100	0.0427
DEC 24,83	DEC 23,83	******	******	******	******	******	******	******
DEC 25,83	DEC 24,83	0.06	0.18	0.025	<W 0.005	0.135	0.048	G 0.0026
DEC 26,83	DEC 25,83	******	******	******	******	******	******	G 0.0014
DEC 29,83	DEC 28,83	0.05	0.08	0.015	<W 0.005	0.025	0.088	0.0234

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : BALSAM LAKE/DAILY/AEROCHEM #06

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES		SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
JAN 4,83	JAN 3,83	750	750	830	1600	2	1.3	2	28519	2	1		17		N
JAN 6,83	JAN 5,83	830	830	****	****	2	2.2	2	28520	2	1		2	E	N
JAN 7,83	JAN 6,83	830	830	900	1800	2	5.1	2	28521	2	1		****	EK	
JAN 8,83	JAN 7,83	830	755	****	****	2	0.5	2	28522	2	1		****	EK	
JAN 11,83	JAN 10,83	755	755	1315	715	1	11.5	2	28523	2	1		108		M
JAN 12,83	JAN 11,83	755	755	1015	200	3	3.2	2	28524	2	1		68		
JAN 14,83	JAN 13,83	800	800	830	2200	2	1.1	2	28525	2	1		****	EK	
JAN 16,83	JAN 15,83	800	1015	900	1100	2	3.5	2	28526	2	1		****	EK	
JAN 23,83	JAN 22,83	755	755	200	800	2	2.2	2	28527	2	1		****	EK	
JAN 24,83	JAN 23,83	755	755	2000	755	2	5.3	2	28528	2	1		94		
JAN 25,83	JAN 24,83	755	750	755	750	3	4.3	2	28529	2	1		63		
JAN 27,83	JAN 25,83	750	750	915	2000	2	4.2	2	28530	2	1	U	44	G	Y2
JAN 31,83	JAN 30,83	755	755	1300	755	2	5.1	2	28531	2	1		133		N
FEB 1,83	JAN 31,83	755	750	755	1400	2	0.5	2	28532	2	1		****	EK	
FEB 3,83	FEB 2,83	750	700	800	700	1	16.4	2	28533	2	1		52		
FEB 4,83	FEB 3,83	750	750	830	2200	3	7.4	2	28534	2	1		83		
FEB 7,83	FEB 6,83	750	750	300	750	2	2.1	2	28535	2	1		****	EK	
FEB 8,83	FEB 7,83	750	755	750	1400	2	0.3	2	28536	2	1		****	EK	
FEB 18,83	FEB 17,83	755	755	830	1100	1	0.4	2	28537	2	1		179		N
FEB 23,83	FEB 22,83	750	750	1600	300	3	8.2	2	28538	2	1		92		
MAR 4,83	MAR 3,83	750	****	2300	2345	3	2.5	2	28539	2	1		91		
MAR 5,83	MAR 4,83	750	****	1430	1800	1	10.3	2	28540	2	1		33		N
MAR 7,83	MAR 6,83	750	****	1700	2300	1	0.3	2	28541	2	1		187		N
MAR 9,83	MAR 8,83	755	****	2200	755	1	0.5	2	28542	2	1		87		
MAR 10,83	MAR 9,83	755	****	755	755	1	3.5	2	28543	2	1		51	A	
MAR 19,83	MAR 18,83	900	900	1815	900	1	6.5	2	28544	2	1		99		
MAR 20,83	MAR 19,83	900	830	900	2300	1	6.1	2	28545	2	1		90		
MAR 22,83	MAR 21,83	755	755	815	700	2	12.5	2	28546	2	1		55		JHM
MAR 28,83	MAR 27,83	750	750	830	700	2	7.4	2	28548	2	1		66		JTHCM
MAR 29,83	MAR 28,83	750	730	845	1800	3	2.2	2	28549	2	1		44		N
APR 3,83	APR 2,83	1015	1015	2230	400	3	12.5	2	28550	2	1		91		
APR 4,83	APR 3,83	1015	830	1015	700	1	5.4	2	28551	2	1		98		
APR 5,83	APR 4,83	830	755	1000	1800	2	0.4	2	28552	2	1		****	EK	
APR 7,83	APR 6,83	755	755	2200	755	1	0.4	2	28553	2	1		148		N
APR 8,83	APR 7,83	755	755	755	1145	1	5.3	2	28554	2	1		88	B	
APR 10,83	APR 9,83	1100	1100	2000	1000	1	18.3	2	28555	2	1		104	A	
APR 11,83	APR 10,83	1100	755	500	700	2	0.3	2	28556	2	1		****	EK	
APR 12,83	APR 11,83	755	750	1700	2300	1	1.1	2	28557	2	1		102		
APR 14,83	APR 13,83	750	750	2300	750	1	2.3	2	28558	2	1		111		
APR 15,83	APR 14,83	750	750	755	530	1	7.3	2	28559	2	1		114		

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : BALSAM LAKE/DAILY/AEROCHEM #06

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
JAN 4,83	JAN 3,83	15.0	******	******	******	******	******	******
JAN 6,83	JAN 5,83	3.0	******	******	******	******	******	******
JAN 7,83	JAN 6,83	******	******	******	******	******	******	******
JAN 8,83	JAN 7,83	******	******	******	******	******	******	******
JAN 11,83	JAN 10,83	799.0	23.5	4.20	4.47	0.0618	1.60	0.45
JAN 12,83	JAN 11,83	141.0	25.0	******	4.24	0.0778	1.40	0.63
JAN 14,83	JAN 13,83	******	******	******	******	******	******	******
JAN 16,83	JAN 15,83	******	******	******	******	******	******	******
JAN 23,83	JAN 22,83	******	******	******	******	******	******	******
JAN 24,83	JAN 23,83	322.0	35.5	4.13	4.09	0.1066	1.65	0.80
JAN 25,83	JAN 24,83	176.0	33.5	4.11	4.08	0.1124	2.70	0.72
JAN 27,83	JAN 25,83	121.0	19.2	******	4.49	0.0572	2.15	0.26
JAN 31,83	JAN 30,83	437.0	47.0	3.94	4.03	0.1328	2.60	0.99
FEB 1,83	JAN 31,83	******	******	******	******	******	******	******
FEB 3,83	FEB 2,83	547.0	43.5	4.05	4.00	0.1296	2.70	0.75
FEB 4,83	FEB 3,83	395.0	28.6	4.24	4.13	0.0978	1.95	0.50
FEB 7,83	FEB 6,83	******	******	******	******	******	******	******
FEB 8,83	FEB 7,83	******	******	******	******	******	******	******
FEB 18,83	FEB 17,83	46.0	******	******	3.30	G 0.5420	G 11.20	G 6.20
FEB 23,83	FEB 22,83	486.0	42.2	4.01	4.05	0.1064	3.35	0.68
MAR 4,83	MAR 3,83	147.0	46.5	******	4.17	0.0976	3.90	1.01
MAR 5,83	MAR 4,83	218.0	24.8	4.22	4.36	0.0650	2.20	0.37
MAR 7,83	MAR 6,83	36.0	******	******	4.72	0.0394	2.50	0.27
MAR 9,83	MAR 8,83	28.0	******	******	******	******	4.30	1.11
MAR 10,83	MAR 9,83	116.0	U 88.5	******	3.71	G 0.2220	6.35	1.14
MAR 19,83	MAR 18,83	416.0	******	4.50	4.46	0.0564	1.30	0.32
MAR 20,83	MAR 19,83	355.0	******	4.70	4.83	0.0330	0.45	0.10
MAR 22,83	MAR 21,83	445.0	******	U 4.83	4.02	D 0.1214	0.55	0.05
MAR 28,83	MAR 27,83	316.0	25.9	4.24	3.39	0.0684	1.75	0.40
MAR 29,83	MAR 28,83	63.0	******	******	4.22	0.1276	2.50	0.88
APR 3,83	APR 2,83	732.0	11.2	4.60	4.77	0.0360	0.70	0.23
APR 4,83	APR 3,83	340.0	25.2	4.26	4.39	0.0648	1.75	0.44
APR 5,83	APR 4,83	******	******	******	******	******	******	******
APR 7,83	APR 6,83	38.0	******	******	4.03	D 0.1380	4.80	0.53
APR 8,83	APR 7,83	299.0	50.0	3.96	4.01	0.1306	4.50	0.62
APR 10,83	APR 9,83	1224.0	20.6	4.29	4.45	0.0556	1.50	0.29
APR 11,83	APR 10,83	******	******	******	******	******	******	******
APR 12,83	APR 11,83	72.0	******	******	3.99	0.1402	5.20	0.56
APR 14,83	APR 13,83	164.0	76.0	******	3.86	0.1802	D 7.60	0.84
APR 15,83	APR 14,83	536.0	26.2	4.23	4.37	0.0658	2.15	0.37

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : BALSAM LAKE/DAILY/AEROCHEM #06 PAGE : 3

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
JAN 4,83	JAN 3,83	******	******	******	******	******	******	******
JAN 6,83	JAN 5,83	******	******	******	******	******	******	******
JAN 7,83	JAN 6,83	******	******	******	******	******	******	******
JAN 8,83	JAN 7,83	******	******	******	******	******	******	******
JAN 11,83	JAN 10,83	0.13	0.11	0.005	<T 0.005	0.020	0.148	0.0339
JAN 12,83	JAN 11,83	0.14	0.17	0.015	0.030	0.090	0.214	0.0575
JAN 14,83	JAN 13,83	******	******	******	******	******	******	******
JAN 16,83	JAN 15,83	******	******	******	******	******	******	******
JAN 23,83	JAN 22,83	******	******	******	******	******	******	******
JAN 24,83	JAN 23,83	0.05	0.14	<W 0.005	0.015	0.035	0.122	0.0813
JAN 25,83	JAN 24,83	******	0.12	******	0.030	0.040	0.290	0.0832
JAN 27,83	JAN 25,83	******	0.11	******	0.030	0.050	0.490	0.0324
JAN 31,83	JAN 30,83	0.07	0.22	<W 0.005	0.030	0.035	0.348	0.0933
FEB 1,83	JAN 31,83	******	******	******	******	******	******	******
FEB 3,83	FEB 2,83	0.06	0.16	<W 0.005	0.035	0.060	0.130	0.1000
FEB 4,83	FEB 3,83	0.08	0.05	<W 0.005	0.025	0.020	0.218	0.0741
FEB 7,83	FEB 6,83	******	******	******	******	******	******	******
FEB 8,83	FEB 7,83	******	******	******	******	******	******	******
FEB 18,83	FEB 17,83	******	G 1.37	******	******	******	******	0.5012
FEB 23,83	FEB 22,83	0.12	0.16	0.015	0.025	0.045	0.540	0.0891
MAR 4,83	MAR 3,83	0.30	0.21	0.040	0.040	0.100	******	0.0676
MAR 5,83	MAR 4,83	0.21	0.12	0.020	0.030	0.050	0.068	0.0437
MAR 7,83	MAR 6,83	******	0.35	******	******	******	******	0.0191
MAR 9,83	MAR 8,83	******	0.25	******	******	******	******	******
MAR 10,83	MAR 9,83	0.10	0.13	0.010	0.020	U 0.350	0.230	0.1950
MAR 19,83	MAR 18,83	0.13	0.10	0.015	0.015	0.060	0.178	0.0347
MAR 20,83	MAR 19,83	0.13	0.04	<W 0.005	<T 0.005	0.025	0.014	0.0148
MAR 22,83	MAR 21,83	0.14	0.03	<T 0.005	0.010	0.015	<T 0.002	0.0955
MAR 28,83	MAR 27,83	0.07	0.06	<W 0.005	0.015	0.015	0.098	0.4074
MAR 29,83	MAR 28,83	******	0.16	******	******	******	******	0.0603
APR 3,83	APR 2,83	0.11	0.05	0.020	0.020	0.020	0.072	0.0170
APR 4,83	APR 3,83	0.17	0.06	0.020	0.030	0.040	0.190	0.0407
APR 5,83	APR 4,83	******	******	******	******	******	******	******
APR 7,83	APR 6,83	******	0.15	******	******	******	******	0.0933
APR 8,83	APR 7,83	0.20	0.08	0.020	0.030	0.010	0.320	0.0977
APR 10,83	APR 9,83	0.08	0.04	0.010	0.020	0.010	0.088	0.0355
APR 11,83	APR 10,83	******	******	******	******	******	******	******
APR 12,83	APR 11,83	D 0.29	0.09	0.005	0.095	0.030	******	0.1023
APR 14,83	APR 13,83	0.30	0.18	0.030	0.050	0.070	0.720	0.1380
APR 15,83	APR 14,83	0.24	0.14	0.030	0.020	0.060	0.112	0.0427

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : BALSAM LAKE/DAILY/AEROCHEM #06 PAGE : 4

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES		SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
APR 20,83	APR 19,83	630	630	2300	200	2	2.2	2	28560	2	1		92		
APR 21,83	APR 20,83	630	640	1900	300	2	3.0	2	28561	2	1		61		HM
APR 29,83	APR 28,83	755	755	1800	200	1	3.0	2	28562	2	1		109		
MAY 1,83	APR 30,83	800	1000	1300	2000	1	21.0	1	28563	2	1		33		N
MAY 2,83	MAY 1,83	1000	750	2100	600	1	20.0	1	28564	2	1		****	EG	
MAY 3,83	MAY 2,83	750	755	1400	500	1	55.0	1	28565	2	1		58		
MAY 4,83	MAY 3,83	755	755	1700	730	1	8.0	1	28566	2	1		72		
MAY 7,83	MAY 6,83	1000	1000	200	700	1	2.0	1	28567	2	1		98	C	H
MAY 8,83	MAY 7,83	1000	1015	1100	900	1	27.2	1	28568	2	1		109		
MAY 15,83	MAY 14,83	1030	1030	1900	800	1	15.0	1	28569	2	1		103		
MAY 20,83	MAY 19,83	750	750	1530	720	1	18.0	1	28570	2	1		98		
MAY 21,83	MAY 20,83	750	830	920	100	1	2.0	1	28571	2	1		88		
MAY 23,83	MAY 22,83	910	910	1600	200	1	13.4	1	28572	2	1		69		J
MAY 26,83	MAY 25,83	750	750	1500	700	1	12.3	1	28573	2	1	U	57	H	
MAY 30,83	MAY 29,83	800	750	1900	500	1	3.2	1	28574	2	1		82		
JUN 1,83	MAY 31,83	800	755	1635	700	1	5.0	1	28575	2	1		102		
JUN 6,83	JUN 5,83	755	755	800	900	1	0.4	1	28576	2	1		58		
JUN 8,83	JUN 6,83	755	1400	800	****	1	6.1	1	28577	2	1		92		Y2
JUN 10,83	JUN 9,83	755	755	2300	100	1	4.1	1	28578	2	1		93		
JUN 27,83	JUN 26,83	800	750	2100	500	1	6.0	1	28579	2	1		101		
JUN 28,83	JUN 27,83	800	755	900	2200	1	3.2	1	28580	2	1		78		
JUL 2,83	JUL 1,83	800	745	1400	****	1	5.3	1	28581	2	1		96		
JUL 3,83	JUL 2,83	800	1045	730	830	1	2.4	1	28582	2	1		115		
JUL 5,83	JUL 4,83	800	755	1900	2300	1	7.1	1	28583	2	1		103		H
JUL 9,83	JUL 8,83	750	750	2045	100	1	1.1	1	28584	2	1		89		
JUL 25,83	JUL 24,83	800	755	1430	1435	1	0.1	1	28585	2	1		187		N
JUL 29,83	JUL 28,83	800	800	****	****	1	3.0	1	28586	2	1		84		
JUL 30,83	JUL 29,83	800	800	****	****	1	29.0	1	28587	2	1	U	23	H	N
JUL 31,83	JUL 30,83	800	800	****	****	1	6.1	1	28588	2	1		102		
AUG 1,83	JUL 31,83	800	800	****	****	1	12.0	1	28589	2	1		60		
AUG 2,83	AUG 1,83	800	800	****	****	1	0.4	1	28590	2	1		101		
AUG 4,83	AUG 3,83	750	750	2200	730	1	12.1	1	28591	2	1		55		
AUG 9,83	AUG 8,83	750	750	1430	1445	1	1.1	1	28592	2	1		70		
AUG 12,83	AUG 11,83	755	755	815	930	1	1.0	1	28917	2	1		68		
AUG 20,83	AUG 19,83	830	830	1500	1600	1	0.4	1	28594	2	1		70		
AUG 22,83	AUG 21,83	750	750	130	750	1	23.4	1	28595	2	1		102		
AUG 29,83	AUG 28,83	750	750	1515	1645	1	43.0	1	28596	2	1		110		JH
AUG 30,83	AUG 29,83	750	755	1550	730	1	5.2	1	28597	2	1		90		J
AUG 31,83	AUG 30,83	755	730	1330	1700	1	29.1	1	28598	2	1		83		JC
SEP 7,83	SEP 6,83	750	750	1030	1100	1	0.3	1	28599	2	1		52		

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : BALSAM LAKE/DAILY/AEROCHEM #06

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
APR 20,83	APR 19,83	131.0	******	******	4.61	0.1462	1.40	0.15
APR 21,83	APR 20,83	118.0	******	******	G 5.67	******	0.50	0.06
APR 29,83	APR 28,83	211.0	34.7	4.28	4.63	0.0534	4.25	0.71
MAY 1,83	APR 30,83	451.0	14.2	4.52	4.62	0.0458	1.20	0.14
MAY 2,83	MAY 1,83	******	******	******	******	******	******	******
MAY 3,83	MAY 2,83	2048.0	16.3	4.50	4.60	0.0482	1.55	0.23
MAY 4,83	MAY 3,83	373.0	16.0	4.47	4.48	0.0550	1.30	0.12
MAY 7,83	MAY 6,83	126.0	******	******	U 4.62	0.0684	6.30	0.90
MAY 8,83	MAY 7,83	1917.0	16.5	4.45	4.67	0.0430	1.90	0.28
MAY 15,83	MAY 14,83	999.0	45.5	4.06	4.20	0.0984	4.95	0.48
MAY 20,83	MAY 19,83	1134.0	14.4	4.58	4.63	0.0422	1.10	0.17
MAY 21,83	MAY 20,83	114.0	******	******	4.15	0.1058	5.05	1.26
MAY 23,83	MAY 22,83	598.0	26.6	U 4.62	4.34	0.0702	2.50	0.25
MAY 26,83	MAY 25,83	450.0	37.9	4.15	4.23	0.0890	3.45	0.60
MAY 30,83	MAY 29,83	169.0	47.4	******	4.11	0.1092	4.90	0.57
JUN 1,83	MAY 31,83	328.0	25.4	4.34	4.48	0.0630	2.75	0.47
JUN 6,83	JUN 5,83	15.0	******	******	3.74	G 0.2820	******	******
JUN 8,83	JUN 6,83	361.0	15.7	4.45	4.65	0.0494	1.65	0.11
JUN 10,83	JUN 9,83	246.0	G 112.0	3.77	3.86	0.2220	12.80	G 2.85
JUN 27,83	JUN 26,83	391.0	37.8	4.17	D 4.43	0.0762	6.25	0.81
JUN 28,83	JUN 27,83	162.0	19.0	4.33	4.57	0.0504	2.00	0.28
JUL 2,83	JUL 1,83	328.0	34.5	4.12	4.27	0.1584	4.00	0.72
JUL 3,83	JUL 2,83	178.0	10.1	4.57	4.90	0.0304	0.65	0.21
JUL 5,83	JUL 4,83	472.0	18.5	4.42	4.68	0.0428	2.85	0.25
JUL 9,83	JUL 8,83	63.0	******	******	3.99	0.1540	11.00	1.48
JUL 25,83	JUL 24,83	12.0	******	******	******	******	******	******
JUL 29,83	JUL 28,83	162.0	58.0	******	4.05	0.1372	5.65	0.80
JUL 30,83	JUL 29,83	442.0	18.7	******	4.63	0.0504	2.25	0.25
JUL 31,83	JUL 30,83	399.0	51.0	3.95	4.08	0.1248	4.95	0.53
AUG 1,83	JUL 31,83	464.0	34.0	4.15	4.07	0.1246	3.60	0.32
AUG 2,83	AUG 1,83	26.0	******	******	G 6.68	0.0206	******	******
AUG 4,83	AUG 3,83	430.0	45.0	3.99	4.12	0.1002	4.35	0.70
AUG 9,83	AUG 8,83	50.0	******	******	U 7.22	0.0196	2.60	0.53
AUG 12,83	AUG 11,83	44.0	******	******	4.33	0.0922	******	******
AUG 20,83	AUG 19,83	18.0	******	******	******	******	******	******
AUG 22,83	AUG 21,83	1531.0	15.8	4.35	4.65	0.0478	1.50	0.14
AUG 29,83	AUG 28,83	3042.0	7.6	4.60	5.20	0.0264	1.00	0.05
AUG 30,83	AUG 29,83	300.0	15.6	4.26	4.85	0.0400	1.75	0.31
AUG 31,83	AUG 30,83	1560.0	4.4	4.66	G 5.84	0.0208	0.40	0.09
SEP 7,83	SEP 6,83	10.0	******	******	******	******	******	******

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : BALSAM LAKE/DAILY/AEROCHEM #06

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
APR 20,83	APR 19,83	0.18	0.20	0.030	0.020	0.120	0.070	0.0245
APR 21,83	APR 20,83	0.14	0.06	0.010	<T 0.010	0.030	0.014	G 0.0021
APR 29,83	APR 28,83	G 1.09	0.21	0.110	0.070	0.075	0.720	0.0234
MAY 1,83	APR 30,83	0.08	0.02	0.010	0.015	<T 0.005	0.120	0.0240
MAY 2,83	MAY 1,83	******	******	******	******	******	******	******
MAY 3,83	MAY 2,83	0.19	0.10	0.035	0.030	0.045	0.216	0.0251
MAY 4,83	MAY 3,83	0.12	0.02	0.015	0.035	0.030	0.050	0.0331
MAY 7,83	MAY 6,83	U 2.60	0.28	U 0.260	U 0.145	0.140	0.670	U 0.0240
MAY 8,83	MAY 7,83	0.34	D 0.06	0.050	0.025	0.050	0.236	0.0214
MAY 15,83	MAY 14,83	0.41	0.23	0.055	0.055	0.095	0.630	0.0631
MAY 20,83	MAY 19,83	0.10	D 0.02	0.015	0.015	D 0.010	0.130	0.0234
MAY 21,83	MAY 20,83	0.29	0.13	0.030	0.050	0.035	1.460	0.0708
MAY 23,83	MAY 22,83	0.11	0.05	0.015	0.030	0.020	0.270	0.0457
MAY 26,83	MAY 25,83	0.30	0.11	0.055	0.025	0.020	0.500	0.0589
MAY 30,83	MAY 29,83	0.54	0.16	0.055	0.035	0.050	0.500	0.0776
JUN 1,83	MAY 31,83	0.42	0.14	0.065	0.040	0.030	0.410	0.0331
JUN 6,83	JUN 5,83	******	******	******	******	******	******	0.1820
JUN 8,83	JUN 6,83	0.15	0.06	0.020	0.030	0.025	0.032	0.0224
JUN 10,83	JUN 9,83	G 2.85	0.70	G 0.655	0.120	0.090	1.490	0.1380
JUN 27,83	JUN 26,83	1.03	0.22	0.165	G 0.205	0.055	1.190	D 0.0372
JUN 28,83	JUN 27,83	******	0.10	******	******	******	******	0.0269
JUL 2,83	JUL 1,83	0.50	0.15	0.070	0.065	0.040	0.760	0.0537
JUL 3,83	JUL 2,83	******	0.08	******	******	******	1.020	0.0126
JUL 5,83	JUL 4,83	0.51	0.16	0.090	0.050	0.100	0.460	0.0209
JUL 9,83	JUL 8,83	******	0.46	******	******	******	******	0.1023
JUL 25,83	JUL 24,83	******	******	******	******	******	******	******
JUL 29,83	JUL 28,83	0.85	0.39	0.095	0.105	0.175	0.220	0.0891
JUL 30,83	JUL 29,83	0.25	0.10	0.030	0.025	0.045	0.274	0.0234
JUL 31,83	JUL 30,83	0.09	0.18	0.020	0.040	0.040	0.560	0.0832
AUG 1,83	JUL 31,83	0.08	0.10	0.015	0.025	0.020	0.400	0.0851
AUG 2,83	AUG 1,83	******	******	******	******	******	******	G 0.0002
AUG 4,83	AUG 3,83	0.34	0.13	0.075	<W 0.005	0.025	0.570	0.0759
AUG 9,83	AUG 8,83	******	0.47	******	******	******	******	U 0.0001
AUG 12,83	AUG 11,83	******	******	******	******	******	******	0.0468
AUG 20,83	AUG 19,83	******	******	******	******	******	******	******
AUG 22,83	AUG 21,83	0.12	0.05	0.015	<T 0.005	0.025	0.150	0.0224
AUG 29,83	AUG 28,83	0.26	0.06	0.015	0.025	0.015	0.162	0.0063
AUG 30,83	AUG 29,83	0.35	0.32	0.035	0.130	0.120	0.338	0.0141
AUG 31,83	AUG 30,83	0.13	0.09	0.015	0.055	0.035	0.140	G 0.0014
SEP 7,83	SEP 6,83	******	******	******	******	******	******	******

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : BALSAM LAKE/DAILY/AEROCHEM #06

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES		SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
SEP 10,83	SEP 9,83	830	830	2100	2145	1	1.3	1	28600	2	1		112		
SEP 17,83	SEP 16,83	****	830	****	****	1	17.4	1	29700	2	1		98		
SEP 19,83	SEP 18,83	750	750	900	1800	1	11.2	1	29701	2	1		101		
SEP 21,83	SEP 20,83	****	750	****	****	1	11.1	1	29702	2	1		104		
SEP 22,83	SEP 21,83	750	755	750	1300	1	3.4	1	29703	2	1		97		HM
SEP 23,83	SEP 22,83	755	750	1315	1330	1	0.3	1	29704	2	1		77		
SEP 24,83	SEP 23,83	750	910	****	****	1	0.4	1	29705	2	1		132		N
SEP 26,83	SEP 25,83	****	750	****	****	1	4.2	1	29706	2	1		96		
SEP 28,83	SEP 27,83	750	750	810	900	1	0.3	1	29707	2	1		36	E	N
OCT 4,83	OCT 3,83	750	750	1645	200	1	10.0	1	29708	2	1		102		JH
OCT 5,83	OCT 4,83	750	755	900	****	1	19.2	1	29709	2	1		103		JHM
OCT 6,83	OCT 5,83	755	750	1150	730	1	8.0	1	29710	2	1		97		
OCT 8,83	OCT 7,83	910	910	100	910	1	7.0	1	29711	2	1		76		
OCT 9,83	OCT 8,83	910	1000	910	1400	1	4.3	1	29712	2	1		97		
OCT 13,83	OCT 12,83	750	755	750	600	1	8.4	1	29713	2	1		98		
OCT 14,83	OCT 13,83	755	750	1720	730	1	24.0	1	29714	2	1		104		
OCT 15,83	OCT 14,83	750	850	1500	600	1	4.1	1	29715	2	1		93		
OCT 23,83	OCT 22,83	800	1030	500	1000	1	7.1	1	29716	2	1		83		
OCT 24,83	OCT 23,83	1030	750	1030	1900	1	1.4	1	29717	2	1		39		N
OCT 25,83	OCT 24,83	755	750	****	****	1	0.1	1	29718	2	1		****	EK	
OCT 26,83	OCT 25,83	755	755	1500	600	1	2.0	1	29719	2	1		39		N
NOV 2,83	OCT 26,83	755	750	****	****	1	4.1	1	29720	2	1		104		JZ
NOV 3,83	NOV 2,83	750	745	755	745	1	13.4	1	29721	2	1	U	54	G	
NOV 4,83	NOV 3,83	745	750	745	700	2	4.1	1	29722	2	1		47		N
NOV 5,83	NOV 4,83	750	830	900	2200	2	****	2	29723	2	1		****		JCM
NOV 11,83	NOV 10,83	830	830	1700	730	2	7.3	2	29724	2	1		112		
NOV 12,83	NOV 11,83	830	845	945	1400	3	17.5	2	29725	2	1		50		JHCM
NOV 16,83	NOV 15,83	755	755	1430	755	3	9.5	2	29726	2	1		102		JM
NOV 17,83	NOV 16,83	755	750	755	130	2	9.1	2	29727	2	1		84		M
NOV 19,83	NOV 18,83	845	845	2100	100	2	1.3	2	29728	2	1		103		
NOV 21,83	NOV 20,83	750	750	1600	200	1	8.4	2	29729	2	1		112		
NOV 24,83	NOV 23,83	750	750	1600	600	1	3.5	2	29730	2	1		116		
NOV 26,83	NOV 25,83	815	815	1700	2300	2	1.5	2	29731	2	1		79		
NOV 29,83	NOV 28,83	750	750	2130	100	3	5.5	2	29732	2	1		114		
NOV 30,83	NOV 29,83	750	745	1600	2000	2	2.3	2	29733	2	1		75		
DEC 1,83	NOV 30,83	745	755	815	1400	2	3.5	2	29734	2	1		67		HC
DEC 2,83	DEC 1,83	755	750	900	1900	2	1.1	2	29735	2	1		79		
DEC 3,83	DEC 2,83	750	1000	900	2200	2	1.5	2	29736	2	1	U	221	P	N
DEC 5,83	DEC 4,83	830	830	1900	200	2	3.2	2	29737	2	1		113		
DEC 6,83	DEC 5,83	830	900	400	800	2	5.2	2	29738	2	1		81		

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : BALSAM LAKE/DAILY/AEROCHEM #06

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
SEP 10,83	SEP 9,83	94.0	27.5	******	******	******	******	******
SEP 17,83	SEP 16,83	1103.0	41.5	******	4.20	0.1064	3.35	0.50
SEP 19,83	SEP 18,83	732.0	28.4	4.20	4.32	0.0742	2.45	0.37
SEP 21,83	SEP 20,83	740.0	19.9	******	4.45	0.0562	1.80	0.22
SEP 22,83	SEP 21,83	212.0	3.8	G 4.97	G 5.35	0.0204	0.30	0.03
SEP 23,83	SEP 22,83	15.0	******	******	U 7.08	0.0142	******	******
SEP 24,83	SEP 23,83	34.0	******	******	4.89	0.0328	1.65	0.06
SEP 26,83	SEP 25,83	259.0	49.1	******	4.09	0.1218	4.00	0.72
SEP 28,83	SEP 27,83	7.0	******	******	******	******	******	******
OCT 4,83	OCT 3,83	660.0	19.1	4.24	G 6.50	0.0304	3.80	0.39
OCT 5,83	OCT 4,83	1272.0	44.3	3.80	4.25	0.1148	4.70	0.89
OCT 6,83	OCT 5,83	500.0	15.1	4.15	4.61	0.0556	1.20	0.25
OCT 8,83	OCT 7,83	343.0	28.6	4.12	4.38	0.0800	2.75	0.67
OCT 9,83	OCT 8,83	269.0	28.4	4.14	4.35	0.0782	2.80	0.67
OCT 13,83	OCT 12,83	530.0	6.3	G 4.80	5.08	0.0262	0.60	0.08
OCT 14,83	OCT 13,83	1611.0	9.3	4.52	4.68	0.0334	0.90	0.11
OCT 15,83	OCT 14,83	247.0	12.2	4.81	5.08	0.0270	1.95	D 0.35
OCT 23,83	OCT 22,83	381.0	16.5	4.07	4.47	0.0540	1.40	0.33
OCT 24,83	OCT 23,83	35.0	******	******	4.29	B 1.4840	2.60	0.51
OCT 25,83	OCT 24,83	******	******	******	******	******	******	******
OCT 26,83	OCT 25,83	51.0	******	******	******	******	3.40	0.74
NOV 2,83	OCT 26,83	275.0	29.4	3.96	4.44	0.0722	3.65	0.71
NOV 3,83	NOV 2,83	468.0	73.7	******	3.91	0.1544	7.45	1.33
NOV 4,83	NOV 3,83	125.0	7.9	******	U 7.28	0.0134	1.05	0.12
NOV 5,83	NOV 4,83	527.0	6.7	4.49	5.06	0.0272	0.45	0.07
NOV 11,83	NOV 10,83	527.0	48.6	3.69	4.10	0.1200	4.05	0.88
NOV 12,83	NOV 11,83	561.0	4.4	G 4.92	G 6.04	0.0194	0.25	<T 0.01
NOV 16,83	NOV 15,83	626.0	14.9	4.11	4.68	0.0464	0.85	0.34
NOV 17,83	NOV 16,83	493.0	10.7	4.36	4.79	0.0372	0.65	0.18
NOV 19,83	NOV 18,83	86.0	******	******	4.19	0.0870	3.65	0.98
NOV 21,83	NOV 20,83	604.0	26.0	3.96	4.34	0.0618	2.15	0.54
NOV 24,83	NOV 23,83	261.0	50.0	3.76	4.05	0.1122	4.15	1.17
NOV 26,83	NOV 25,83	76.0	******	******	4.90	0.0300	2.05	0.39
NOV 29,83	NOV 28,83	405.0	25.1	3.91	4.30	0.0736	1.90	0.50
NOV 30,83	NOV 29,83	111.0	28.1	******	4.33	0.0614	1.60	0.78
DEC 1,83	NOV 30,83	151.0	10.2	******	G 5.89	0.0180	1.05	0.22
DEC 2,83	DEC 1,83	56.0	******	******	G 5.93	0.0220	0.80	<W 0.01
DEC 3,83	DEC 2,83	213.0	7.5	4.71	G 5.10	0.0278	D 0.45	0.21
DEC 5,83	DEC 4,83	232.0	12.0	4.47	4.74	0.0408	0.70	0.32
DEC 6,83	DEC 5,83	272.0	14.7	4.38	4.62	0.0482	0.90	0.42

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : BALSAM LAKE/DAILY/AEROCHEM #06

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
SEP 10,83	SEP 9,83	B 2.93	******	B 0.415	0.130	G 0.270	******	******
SEP 17,83	SEP 16,83	0.15	0.07	0.015	0.020	0.015	0.304	0.0631
SEP 19,83	SEP 18,83	0.19	0.08	0.030	0.035	0.015	0.286	0.0479
SEP 21,83	SEP 20,83	0.17	0.05	0.025	0.020	0.030	0.096	0.0355
SEP 22,83	SEP 21,83	0.16	0.02	0.020	0.055	0.040	<T 0.004	G 0.0045
SEP 23,83	SEP 22,83	******	******	******	******	******	******	U 0.0001
SEP 24,83	SEP 23,83	******	0.24	******	******	******	******	0.0129
SEP 26,83	SEP 25,83	0.65	0.18	0.090	0.010	0.055	0.310	0.0813
SEP 28,83	SEP 27,83	******	******	******	******	******	******	******
OCT 4,83	OCT 3,83	0.86	0.16	0.180	B 0.140	0.030	0.620	G 0.0003
OCT 5,83	OCT 4,83	0.04	0.16	0.060	0.075	0.030	0.860	0.0562
OCT 6,83	OCT 5,83	0.11	0.06	0.010	0.030	<W 0.005	0.098	0.0245
OCT 8,83	OCT 7,83	0.53	0.16	0.095	0.045	<T 0.010	0.298	0.0417
OCT 9,83	OCT 8,83	0.58	0.21	0.090	0.045	0.025	0.298	0.0447
OCT 13,83	OCT 12,83	0.08	0.12	0.010	0.020	<W 0.005	0.076	0.0083
OCT 14,83	OCT 13,83	0.08	0.04	0.015	0.015	<W 0.005	0.084	0.0209
OCT 15,83	OCT 14,83	0.51	0.13	0.095	0.075	<W 0.005	0.370	0.0083
OCT 23,83	OCT 22,83	0.14	0.06	0.030	0.020	0.080	0.074	0.0339
OCT 24,83	OCT 23,83	******	0.33	******	******	******	******	0.0513
OCT 25,83	OCT 24,83	******	******	******	******	******	******	******
OCT 26,83	OCT 25,83	******	0.29	******	******	******	******	******
NOV 2,83	OCT 26,83	0.55	0.17	0.080	0.075	0.090	0.540	0.0363
NOV 3,83	NOV 2,83	******	0.27	******	******	******	******	0.1230
NOV 4,83	NOV 3,83	******	0.10	******	******	******	******	U 0.0001
NOV 5,83	NOV 4,83	0.07	0.05	<T 0.005	<T 0.010	<T 0.010	<T 0.002	0.0087
NOV 11,83	NOV 10,83	0.15	0.18	0.020	0.030	0.060	0.570	0.0794
NOV 12,83	NOV 11,83	0.09	0.06	0.010	<T 0.010	0.015	<T 0.006	G 0.0009
NOV 16,83	NOV 15,83	0.11	0.11	0.010	<T 0.015	0.050	0.066	0.0209
NOV 17,83	NOV 16,83	0.08	0.07	0.010	<T 0.010	0.020	0.010	0.0162
NOV 19,83	NOV 18,83	******	0.38	******	******	******	******	0.0646
NOV 21,83	NOV 20,83	0.20	0.26	0.025	0.035	0.085	0.230	0.0457
NOV 24,83	NOV 23,83	0.60	0.36	0.045	0.055	0.120	0.540	0.0891
NOV 26,83	NOV 25,83	******	0.16	******	******	******	******	0.0126
NOV 29,83	NOV 28,83	0.12	0.09	0.015	0.020	0.040	0.128	0.0501
NOV 30,83	NOV 29,83	0.27	0.29	0.040	0.020	0.090	0.206	0.0468
DEC 1,83	NOV 30,83	0.38	0.20	0.035	0.025	0.100	0.162	G 0.0013
DEC 2,83	DEC 1,83	******	0.51	******	******	******	******	G 0.0012
DEC 3,83	DEC 2,83	0.25	0.15	0.035	<T 0.010	0.065	<T 0.002	G 0.0079
DEC 5,83	DEC 4,83	0.12	0.15	0.025	<T 0.010	0.035	0.126	0.0182
DEC 6,83	DEC 5,83	0.14	0.16	0.025	0.020	0.060	0.154	0.0240

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : BALSAM LAKE/DAILY/AEROCHEM #06 PAGE : 10

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
DEC 7,83	DEC 6,83	900	1000	800	600	2	30.4	2	29739	2	1	U 34	FI	N
DEC 9,83	DEC 8,83	800	800	900	1900	2	2.5	2	29740	2	1	28		N
DEC 11,83	DEC 10,83	900	945	900	1600	2	0.4	2	29741	2	1	128		N
DEC 12,83	DEC 11,83	945	750	200	750	2	5.5	2	29742	2	1	80		
DEC 13,83	DEC 12,83	750	750	810	1600	1	4.3	2	29743	2	1	115		
DEC 15,83	DEC 14,83	755	755	830	2330	3	1.4	2	29744	2	1	98		
DEC 17,83	DEC 16,83	915	915	1400	2300	2	1.4	2	29745	2	1	33		N
DEC 19,83	DEC 18,83	830	830	800	1600	2	2.1	2	29746	2	1	52	B	
DEC 22,83	DEC 21,83	750	750	1930	700	2	16.2	2	29747	2	1	58	B	
DEC 23,83	DEC 22,83	750	755	845	300	2	5.2	2	29748	2	1	41		N
DEC 27,83	DEC 26,83	915	915	1400	400	2	1.2	2	29749	2	1	2	E	N
DEC 28,83	DEC 27,83	915	755	2300	755	2	3.2	2	29750	2	1	67		
DEC 29,83	DEC 28,83	755	755	755	2200	2	10.1	2	29751	2	1	88		
DEC 30,83	DEC 29,83	755	755	200	300	2	0.1	2	29752	2	1	31	E	N

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : BALSAM LAKE/DAILY/AEROCHEM #06

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD		PH LAB		TOTAL H+ TO PH8.3 MG/L		SULPHATE MG/L	NITRATE AS N MG/L
DEC 7,83	DEC 6,83	669.0	9.0	4.56		4.82		0.0360		0.65	0.14
DEC 9,83	DEC 8,83	45.0	******	******		4.12		0.1020		1.80	******
DEC 11,83	DEC 10,83	33.0	******	******		4.22		0.0828		2.35	1.22
DEC 12,83	DEC 11,83	285.0	17.2	4.18		4.62		0.0424	D	1.35	0.33
DEC 13,83	DEC 12,83	317.0	23.6	4.08		4.36		0.0610		2.20	0.27
DEC 15,83	DEC 14,83	88.0	******	******		3.85		0.1624		4.60	1.51
DEC 17,83	DEC 16,83	30.0	******	******		5.34	G	0.0302		2.10	1.02
DEC 19,83	DEC 18,83	71.0	******	******		4.74		0.0382		0.45	0.33
DEC 22,83	DEC 21,83	611.0	15.7	4.32		4.51		0.0476		1.00	0.38
DEC 23,83	DEC 22,83	139.0	20.9	******		4.47		0.0562		2.45	0.41
DEC 27,83	DEC 26,83	2.0	******	******		******		******		******	******
DEC 28,83	DEC 27,83	139.0	28.2	******		4.19		0.0850		0.40	0.94
DEC 29,83	DEC 28,83	573.0	7.3	4.48		4.89		0.0302		0.20	0.19
DEC 30,83	DEC 29,83	2.0	******	******		******		******		******	******

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : BALSAM LAKE/DAILY/AEROCHEM #06

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
DEC 7,83	DEC 6,83	0.11	0.06	U 0.015	0.020	0.035	0.008	0.0151
DEC 9,83	DEC 8,83	******	******	******	******	******	******	0.0759
DEC 11,83	DEC 10,83	******	G 0.89	******	******	******	******	0.0603
DEC 12,83	DEC 11,83	0.20	0.22	0.035	0.050	0.150	0.080	0.0240
DEC 13,83	DEC 12,83	0.17	0.10	0.020	0.020	0.050	0.074	0.0437
DEC 15,83	DEC 14,83	0.40	0.47	0.075	0.035	0.230	******	0.1413
DEC 17,83	DEC 16,83	******	G 1.17	******	******	******	******	G 0.0046
DEC 19,83	DEC 18,83	******	0.30	******	******	******	******	0.0182
DEC 22,83	DEC 21,83	0.08	U 0.12	0.020	0.035	0.035	0.070	0.0309
DEC 23,83	DEC 22,83	******	0.19	******	******	******	0.152	0.0339
DEC 27,83	DEC 26,83	******	******	******	******	******	******	******
DEC 28,83	DEC 27,83	******	0.63	******	******	******	<T 0.004	0.0646
DEC 29,83	DEC 28,83	0.03	0.06	0.010	<W 0.005	0.020	<W 0.002	0.0129
DEC 30,83	DEC 29,83	******	******	******	******	******	******	******

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DORSET/DAILY/AEROCHEM #20 PAGE : 1

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES		SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
JAN 2,83	JAN 1,83	900	900	****	****	2	0.9	2	27713	2	1		****	EK	
JAN 4,83	JAN 3,83	800	800	900	1200	2	0.7	2	27716	2	1		42		N
JAN 5,83	JAN 4,83	800	800	****	****	2	0.3	2	27719	2	1		10	E	N
JAN 6,83	JAN 5,83	800	800	800	1200	2	0.9	2	27722	2	1		24		N
JAN 7,83	JAN 6,83	800	800	2400	800	2	8.3	2	27725	2	1		52		
JAN 8,83	JAN 7,83	800	800	800	1800	2	5.5	2	27728	2	1		85		
JAN 11,83	JAN 10,83	800	800	1000	800	1	26.9	2	27731	2	1		94		
JAN 12,83	JAN 11,83	800	800	800	200	4	5.4	2	27734	2	1		59		
JAN 14,83	JAN 13,83	800	800	****	****	2	0.9	2	27738	2	1		****	EK	
JAN 15,83	JAN 14,83	800	900	****	****	2	3.2	2	27741	2	1		16		N
JAN 16,83	JAN 15,83	900	900	****	****	2	0.4	2	27744	2	1		3	E	N
JAN 17,83	JAN 16,83	900	800	900	1000	2	0.3	2	27747	2	1		****	EK	
JAN 23,83	JAN 22,83	900	900	****	****	2	1.1	2	27751	2	1		32		N
JAN 24,83	JAN 23,83	900	800	****	****	2	3.1	2	27754	2	1		42		N
JAN 25,83	JAN 24,83	800	800	2400	800	2	3.0	2	27758	2	1		26		N
JAN 26,83	JAN 25,83	800	800	800	1800	2	2.8	2	27762	2	1		57		
JAN 27,83	JAN 26,83	800	800	****	****	2	0.2	2	27766	2	1		****	EK	
JAN 28,83	JAN 27,83	800	800	****	****	2	0.2	2	27769	2	1		****	EK	
JAN 31,83	JAN 30,83	800	800	1200	800	2	7.8	2	27772	2	1		67		
FEB 1,83	JAN 31,83	800	800	800	1800	2	2.0	2	27776	2	1		29		N
FEB 3,83	FEB 2,83	800	800	900	800	1	24.4	2	27780	2	1		98		
FEB 4,83	FEB 3,83	800	800	800	2400	4	6.4	2	27784	2	1		68		
FEB 5,83	FEB 4,83	800	800	1000	1200	2	0.2	2	27788	2	1		****	EK	
FEB 7,83	FEB 6,83	800	800	400	800	2	1.3	2	27791	2	1		2	E	N
FEB 8,83	FEB 7,83	800	830	800	1300	2	1.2	2	27795	2	1		5	E	N
FEB 17,83	FEB 16,83	800	800	300	800	3	3.0	2	27799	2	1		96		
FEB 18,83	FEB 17,83	800	800	800	900	4	0.2	2	27803	2	1		15	E	N
FEB 21,83	FEB 18,83	800	900	500	800	1	0.6	2	27807	2	1		15	E	NY3
FEB 23,83	FEB 22,83	800	800	1700	300	2	11.9	2	27810	2	1		89		
FEB 24,83	FEB 23,83	800	800	1400	1500	2	0.7	2	27814	2	1		37		N
MAR 3,83	MAR 2,83	800	800	1200	1900	4	0.3	2	27820	2	1		119		
MAR 4,83	MAR 3,83	800	800	2230	200	2	7.9	2	27824	2	1		70		
MAR 5,83	MAR 4,83	800	800	****	****	1	1.2	2	27828	2	1		81		
MAR 7,83	MAR 6,83	800	800	1800	2400	1	0.8	2	27831	2	1		97		
MAR 8,83	MAR 7,83	800	900	****	****	1	0.2	2	27835	2	1		15	E	N
MAR 9,83	MAR 8,83	900	800	2400	600	1	2.4	2	27838	2	1		89		C
MAR 10,83	MAR 9,83	800	800	1200	2400	1	2.4	2	27841	2	1		79		M
MAR 16,83	MAR 14,83	800	800	****	****	4	0.5	2	27845	2	1		59		Z
MAR 19,83	MAR 18,83	800	930	1900	930	1	7.1	2	27848	2	1	U	29	G	
MAR 20,83	MAR 19,83	930	930	930	2400	3	5.6	2	27851	2	1		87		

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DORSET/DAILY/AEROCHEM #20

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
JAN 2,83	JAN 1,83	******	******	******	******	******	******	******
JAN 4,83	JAN 3,83	19.0	******	******	4.34	0.0626	******	******
JAN 5,83	JAN 4,83	2.0	******	******	******	******	******	******
JAN 6,83	JAN 5,83	14.0	******	******	4.22	0.0812	******	******
JAN 7,83	JAN 6,83	279.0	26.0	4.26	4.21	0.0824	1.25	0.66
JAN 8,83	JAN 7,83	300.0	27.4	4.09	4.30	0.0848	1.80	0.50
JAN 11,83	JAN 10,83	1626.0	16.3	4.31	4.44	0.0606	1.05	0.23
JAN 12,83	JAN 11,83	205.0	28.4	4.06	4.19	0.0828	1.55	0.73
JAN 14,83	JAN 13,83	******	******	******	******	******	******	******
JAN 15,83	JAN 14,83	34.0	******	******	3.96	G 0.2460	0.65	1.24
JAN 16,83	JAN 15,83	1.0	******	******	******	******	******	******
JAN 17,83	JAN 16,83	******	******	******	******	******	******	******
JAN 23,83	JAN 22,83	23.0	******	******	4.28	0.0788	******	******
JAN 24,83	JAN 23,83	84.0	******	******	3.90	0.1406	2.70	1.05
JAN 25,83	JAN 24,83	51.0	******	******	4.39	0.0660	1.25	0.29
JAN 26,83	JAN 25,83	104.0	******	******	4.66	0.0438	0.85	0.10
JAN 27,83	JAN 26,83	******	******	******	******	******	******	******
JAN 28,83	JAN 27,83	******	******	******	******	******	******	******
JAN 31,83	JAN 30,83	337.0	44.0	4.06	3.99	0.1254	2.80	0.80
FEB 1,83	JAN 31,83	38.0	******	******	******	******	******	******
FEB 3,83	FEB 2,83	1537.0	26.0	4.29	4.24	0.0828	1.55	0.33
FEB 4,83	FEB 3,83	283.0	25.2	4.25	4.24	0.0852	1.60	0.35
FEB 5,83	FEB 4,83	******	******	******	******	******	******	******
FEB 7,83	FEB 6,83	2.0	******	******	******	******	******	******
FEB 8,83	FEB 7,83	4.0	******	******	******	******	******	******
FEB 17,83	FEB 16,83	186.0	G 92.0	3.73	3.67	G 0.2300	5.85	1.69
FEB 18,83	FEB 17,83	2.0	******	******	******	******	******	******
FEB 21,83	FEB 18,83	6.0	******	******	******	******	******	******
FEB 23,83	FEB 22,83	684.0	27.5	4.28	4.26	0.0786	1.55	0.46
FEB 24,83	FEB 23,83	17.0	******	******	4.44	0.0590	******	******
MAR 3,83	MAR 2,83	23.0	******	******	4.20	0.0918	******	******
MAR 4,83	MAR 3,83	356.0	30.5	4.24	4.25	0.0746	2.05	D 0.65
MAR 5,83	MAR 4,83	63.0	******	******	3.90	0.1508	5.95	1.22
MAR 7,83	MAR 6,83	50.0	******	******	4.12	0.0984	3.85	0.56
MAR 8,83	MAR 7,83	2.0	******	******	******	******	******	******
MAR 9,83	MAR 8,83	137.0	39.2	******	4.28	0.0682	1.70	0.49
MAR 10,83	MAR 9,83	122.0	74.0	******	3.87	0.1768	6.00	1.30
MAR 16,83	MAR 14,83	19.0	******	******	******	******	******	******
MAR 19,83	MAR 18,83	132.0	6.0	******	U 5.27	0.0240	0.50	0.09
MAR 20,83	MAR 19,83	315.0	6.8	4.65	4.97	0.0286	0.35	0.08

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DORSET/DAILY/AEROCHEM #20

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
JAN 2,83	JAN 1,83	******	******	******	******	******	******	******
JAN 4,83	JAN 3,83	******	******	******	******	******	******	0.0457
JAN 5,83	JAN 4,83	******	******	******	******	******	******	******
JAN 6,83	JAN 5,83	******	******	******	******	******	******	0.0603
JAN 7,83	JAN 6,83	0.03	0.12	0.005	<T 0.005	0.015	0.180	0.0617
JAN 8,83	JAN 7,83	<T 0.02	0.07	0.005	<T 0.005	0.025	0.236	0.0501
JAN 11,83	JAN 10,83	<W 0.01	0.07	0.005	<W 0.005	<T 0.010	0.060	0.0363
JAN 12,83	JAN 11,83	<T 0.02	0.12	0.005	0.050	0.030	0.288	0.0646
JAN 14,83	JAN 13,83	******	******	******	******	******	******	******
JAN 15,83	JAN 14,83	******	******	******	******	******	******	0.1096
JAN 16,83	JAN 15,83	******	******	******	******	******	******	******
JAN 17,83	JAN 16,83	******	******	******	******	******	******	******
JAN 23,83	JAN 22,83	******	******	******	******	******	******	0.0525
JAN 24,83	JAN 23,83	0.04	0.24	******	0.070	0.055	******	0.1259
JAN 25,83	JAN 24,83	******	0.10	******	******	******	******	0.0407
JAN 26,83	JAN 25,83	<T 0.01	0.09	0.010	0.040	0.030	0.064	0.0219
JAN 27,83	JAN 26,83	******	******	******	******	******	******	******
JAN 28,83	JAN 27,83	******	******	******	******	******	******	******
JAN 31,83	JAN 30,83	0.06	0.18	<W 0.005	0.030	0.040	0.284	0.1023
FEB 1,83	JAN 31,83	******	******	******	******	******	******	******
FEB 3,83	FEB 2,83	0.02	0.13	<W 0.005	0.055	0.050	0.068	0.0575
FEB 4,83	FEB 3,83	******	0.08	******	******	******	0.066	0.0575
FEB 5,83	FEB 4,83	******	******	******	******	******	******	******
FEB 7,83	FEB 6,83	******	******	******	******	******	******	******
FEB 8,83	FEB 7,83	******	******	******	******	******	******	******
FEB 17,83	FEB 16,83	******	0.40	******	******	******	0.780	0.2138
FEB 18,83	FEB 17,83	******	******	******	******	******	******	******
FEB 21,83	FEB 18,83	******	******	******	******	******	******	******
FEB 23,83	FEB 22,83	0.03	0.10	0.010	0.010	0.025	0.228	0.0550
FEB 24,83	FEB 23,83	******	******	******	******	******	******	0.0363
MAR 3,83	MAR 2,83	******	******	******	******	******	******	0.0631
MAR 4,83	MAR 3,83	0.03	0.15	0.010	0.030	0.035	0.490	0.0562
MAR 5,83	MAR 4,83	******	0.23	******	******	******	******	0.1259
MAR 7,83	MAR 6,83	******	0.42	******	******	******	******	0.0759
MAR 8,83	MAR 7,83	******	******	******	******	******	******	******
MAR 9,83	MAR 8,83	0.11	0.17	0.015	0.120	0.130	0.104	0.0525
MAR 10,83	MAR 9,83	0.16	D 0.35	0.030	G 0.440	0.255	0.144	0.1349
MAR 16,83	MAR 14,83	******	******	******	******	******	******	******
MAR 19,83	MAR 18,83	0.11	0.16	0.020	0.050	0.230	<W 0.002	U 0.0054
MAR 20,83	MAR 19,83	0.03	0.06	<T 0.005	0.020	0.035	<W 0.002	0.0107

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DORSET/DAILY/AEROCHEM #20

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES		SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
MAR 22,83	MAR 21,83	800	800	800	800	2	19.4	2	27854	2	1		33		NC
MAR 23,83	MAR 22,83	800	800	800	1400	2	1.1	2	27857	2	1		1	E	N
MAR 28,83	MAR 27,83	800	800	****	****	3	1.9	2	27860	2	1		22		N
MAR 29,83	MAR 28,83	800	830	800	1600	4	6.4	2	27863	2	1		119		
APR 3,83	APR 2,83	800	800	2200	800	3	11.5	2	27866	2	1		79		C
APR 4,83	APR 3,83	800	800	1800	2400	1	2.8	2	27869	2	1		67		
APR 5,83	APR 4,83	800	800	****	****	1	0.9	2	27872	2	1		19		N
APR 7,83	APR 6,83	800	800	430	800	1	5.0	1	27875	2	1	U	99	G	C
APR 8,83	APR 7,83	800	800	800	1230	1	3.8	1	27878	2	1		80		
APR 10,83	APR 9,83	800	1000	130	1000	1	17.6	2	27881	2	1		99		
APR 11,83	APR 10,83	1000	800	1000	1200	1	0.4	2	27884	2	1		66		
APR 12,83	APR 11,83	800	800	900	1300	1	6.0	1	27887	2	1		75		
APR 14,83	APR 13,83	800	800	300	800	1	2.6	1	27891	2	1		78		
APR 15,83	APR 14,83	800	800	800	2300	1	14.0	1	27894	2	1		95		
APR 16,83	APR 15,83	800	800	****	****	1	0.2	1	27897	2	1		****	EK	
APR 17,83	APR 16,83	800	800	800	1200	2	0.4	3	27900	2	1		****	EK	
APR 20,83	APR 19,83	800	800	600	700	2	0.3	2	27903	2	1		36	E	N
APR 21,83	APR 20,83	800	800	1600	800	2	3.8	2	27906	2	1		46		N
APR 22,83	APR 21,83	800	800	800	1100	2	0.4	2	27909	2	1		81		
APR 29,83	APR 28,83	800	800	1830	230	1	8.6	1	27912	2	1		90		
MAY 1,83	APR 30,83	800	800	1400	2000	1	13.8	1	27915	2	1		98		C
MAY 2,83	MAY 1,83	800	800	230	800	1	16.0	1	27918	2	1		106		
MAY 3,83	MAY 2,83	800	800	1430	1630	1	23.8	1	27921	2	1		95		
MAY 4,83	MAY 3,83	800	800	1630	2030	1	4.6	1	27924	2	1		76		
MAY 7,83	MAY 6,83	800	800	1800	2300	1	19.8	1	27927	2	1		98		
MAY 8,83	MAY 7,83	800	800	1200	2400	1	38.6	1	27930	2	1		99		
MAY 15,83	MAY 14,83	830	830	2100	200	1	10.0	1	27933	2	1		107		
MAY 20,83	MAY 19,83	800	800	1600	2200	1	11.5	1	27936	2	1		104		
MAY 23,83	MAY 22,83	800	800	1430	600	1	20.0	1	27939	2	1		102		
MAY 24,83	MAY 23,83	800	800	100	200	1	3.0	1	27942	2	1		72		
MAY 26,83	MAY 25,83	800	800	800	2030	1	12.0	1	27945	2	1		91		
MAY 27,83	MAY 26,83	800	800	800	1600	1	2.2	1	27948	2	1		80		
MAY 30,83	MAY 27,83	800	800	1500	300	1	10.0	1	27951	2	1		102		Y3
JUN 1,83	MAY 30,83	800	800	1400	800	1	6.2	1	27954	2	1		92		Z
JUN 7,83	JUN 6,83	830	830	300	830	1	0.9	1	27957	2	1		86		
JUN 8,83	JUN 7,83	830	830	830	930	1	0.8	1	27960	2	1		50		
JUN 10,83	JUN 9,83	830	800	2130	130	1	7.0	1	27963	2	1		94		
JUN 27,83	JUN 26,83	800	800	2200	500	1	3.6	1	27966	2	1		96		
JUN 28,83	JUN 27,83	800	800	800	900	1	0.6	1	27969	2	1		13	E	N
JUL 1,83	JUN 30,83	800	800	2100	2300	1	0.6	1	27972	2	1		96		

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DORSET/DAILY/AEROCHEM #20

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
MAR 22,83	MAR 21,83	412.0	1.2	G 4.90	G 5.15	0.0260	0.35	<T 0.01
MAR 23,83	MAR 22,83	1.0	******	******	******	******	******	******
MAR 28,83	MAR 27,83	28.0	******	******	******	******	4.25	0.68
MAR 29,83	MAR 28,83	489.0	28.5	4.26	4.31	0.0748	1.50	0.43
APR 3,83	APR 2,83	585.0	8.5	G 4.78	4.94	0.0268	0.50	0.12
APR 4,83	APR 3,83	121.0	17.7	******	4.51	0.0534	1.00	0.31
APR 5,83	APR 4,83	11.0	******	******	******	******	******	******
APR 7,83	APR 6,83	319.0	59.5	4.20	4.35	0.0732	3.25	0.38
APR 8,83	APR 7,83	196.0	******	4.07	4.11	0.1068	3.30	0.49
APR 10,83	APR 9,83	1122.0	D 14.6	D 4.50	4.67	0.0368	1.00	0.17
APR 11,83	APR 10,83	17.0	******	******	******	******	9.40	1.43
APR 12,83	APR 11,83	290.0	******	4.12	4.20	G 0.4100	2.30	0.49
APR 14,83	APR 13,83	130.0	******	******	3.84	0.1986	8.55	1.11
APR 15,83	APR 14,83	853.0	39.1	4.09	4.19	0.0916	3.65	0.45
APR 16,83	APR 15,83	******	******	******	******	******	******	******
APR 17,83	APR 16,83	******	******	******	******	******	******	******
APR 20,83	APR 19,83	7.0	******	******	******	******	******	******
APR 21,83	APR 20,83	113.0	******	******	4.83	0.1090	0.85	0.07
APR 22,83	APR 21,83	21.0	******	******	******	******	0.25	0.04
APR 29,83	APR 28,83	499.0	37.6	4.13	4.27	0.0896	3.70	0.51
MAY 1,83	APR 30,83	867.0	10.9	4.64	4.83	0.0342	0.95	0.08
MAY 2,83	MAY 1,83	1089.0	16.5	4.44	4.67	0.0468	1.65	0.13
MAY 3,83	MAY 2,83	1456.0	13.4	4.62	4.91	0.0350	1.55	0.20
MAY 4,83	MAY 3,83	227.0	16.6	4.45	4.59	0.0474	1.45	0.11
MAY 7,83	MAY 6,83	1254.0	50.8	4.01	4.09	0.1184	3.95	0.88
MAY 8,83	MAY 7,83	2450.0	22.4	4.37	4.55	0.0528	2.60	0.34
MAY 15,83	MAY 14,83	687.0	32.4	4.16	4.29	0.0786	3.20	0.35
MAY 20,83	MAY 19,83	767.0	11.4	4.67	4.84	0.0350	1.10	0.15
MAY 23,83	MAY 22,83	1317.0	21.2	4.33	4.50	0.0556	1.80	0.27
MAY 24,83	MAY 23,83	139.0	******	******	4.83	0.0348	1.45	0.07
MAY 26,83	MAY 25,83	704.0	38.3	4.14	4.25	0.0910	3.30	0.65
MAY 27,83	MAY 26,83	113.0	******	******	******	******	0.75	0.03
MAY 30,83	MAY 27,83	654.0	32.1	4.14	4.25	0.0874	3.25	0.25
JUN 1,83	MAY 30,83	367.0	26.2	4.29	4.47	0.0670	2.80	0.44
JUN 7,83	JUN 6,83	50.0	******	******	G 5.43	0.0334	3.45	0.50
JUN 8,83	JUN 7,83	26.0	******	******	G 5.62	G 0.5120	3.70	0.54
JUN 10,83	JUN 9,83	423.0	39.0	4.20	4.41	0.1552	4.90	1.00
JUN 27,83	JUN 26,83	223.0	******	3.90	4.05	0.1344	7.35	0.81
JUN 28,83	JUN 27,83	5.0	******	******	******	******	******	******
JUL 1,83	JUN 30,83	37.0	******	******	3.84	0.1968	7.55	0.98

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DORSET/DAILY/AEROCHEM #20

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
MAR 22,83	MAR 21,83	0.03	0.02	<T 0.005	0.010	0.015	<T 0.004	G 0.0071
MAR 23,83	MAR 22,83	******	******	******	******	******	******	******
MAR 28,83	MAR 27,83	******	******	******	******	******	******	******
MAR 29,83	MAR 28,83	0.06	0.02	<T 0.005	0.010	0.015	0.064	0.0490
APR 3,83	APR 2,83	D 0.03	<W 0.01	<T 0.005	0.015	0.015	0.060	0.0115
APR 4,83	APR 3,83	0.17	0.05	<T 0.005	0.060	0.050	0.052	0.0309
APR 5,83	APR 4,83	******	******	******	******	******	******	******
APR 7,83	APR 6,83	0.54	0.16	0.040	0.140	0.105	0.098	0.0447
APR 8,83	APR 7,83	0.14	0.10	0.010	0.060	0.050	0.166	0.0776
APR 10,83	APR 9,83	0.05	0.06	0.010	0.050	0.050	0.064	0.0214
APR 11,83	APR 10,83	******	******	******	******	******	******	******
APR 12,83	APR 11,83	0.04	0.07	0.010	0.030	0.030	0.114	0.0631
APR 14,83	APR 13,83	0.72	0.31	0.080	0.110	0.160	0.750	0.1445
APR 15,83	APR 14,83	0.27	0.21	0.050	0.050	0.110	0.272	0.0646
APR 16,83	APR 15,83	******	******	******	******	******	******	******
APR 17,83	APR 16,83	******	******	******	******	******	******	******
APR 20,83	APR 19,83	******	******	******	******	******	******	******
APR 21,83	APR 20,83	0.07	0.07	0.010	0.040	0.030	0.024	0.0148
APR 22,83	APR 21,83	******	0.07	******	******	******	******	******
APR 29,83	APR 28,83	0.33	0.11	0.050	0.045	0.030	0.450	0.0537
MAY 1,83	APR 30,83	0.05	0.04	0.020	0.015	<W 0.005	0.040	0.0148
MAY 2,83	MAY 1,83	0.12	0.08	0.030	0.030	0.035	0.152	0.0214
MAY 3,83	MAY 2,83	0.27	0.08	0.045	0.045	0.040	0.282	0.0123
MAY 4,83	MAY 3,83	0.16	0.08	0.025	0.030	0.055	0.020	0.0257
MAY 7,83	MAY 6,83	0.54	0.20	0.065	0.040	0.040	0.430	0.0813
MAY 8,83	MAY 7,83	0.40	0.11	0.065	0.040	0.060	0.352	0.0282
MAY 15,83	MAY 14,83	0.17	0.13	0.025	0.045	0.055	0.420	0.0513
MAY 20,83	MAY 19,83	0.24	0.06	0.035	0.030	0.030	0.074	0.0145
MAY 23,83	MAY 22,83	0.10	0.10	0.020	0.030	0.025	D 0.198	0.0316
MAY 24,83	MAY 23,83	0.13	0.14	0.025	0.055	0.055	0.106	0.0148
MAY 26,83	MAY 25,83	0.27	0.15	0.045	0.035	0.030	0.518	0.0562
MAY 27,83	MAY 26,83	0.19	0.21	0.065	0.050	0.110	0.164	******
MAY 30,83	MAY 27,83	0.10	0.08	0.020	0.035	0.035	0.310	0.0562
JUN 1,83	MAY 30,83	0.33	0.12	0.045	0.060	0.045	0.332	0.0339
JUN 7,83	JUN 6,83	******	0.26	******	******	******	0.720	G 0.0037
JUN 8,83	JUN 7,83	******	******	******	******	******	******	G 0.0024
JUN 10,83	JUN 9,83	1.21	0.22	0.200	0.055	0.040	0.660	0.0389
JUN 27,83	JUN 26,83	0.77	0.25	0.145	0.125	0.085	0.760	0.0891
JUN 28,83	JUN 27,83	******	******	******	******	******	******	******
JUL 1,83	JUN 30,83	******	0.34	******	******	******	******	0.1445

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DORSET/DAILY/AEROCHEM #20

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
JUL 5,83	JUL 1,83	800	800	1700	2100	1	21.0	1	27975	2	1	107	E	Z
JUL 9,83	JUL 8,83	800	800	2300	2400	1	1.6	1	27978	2	1	102		
JUL 16,83	JUL 15,83	800	800	1230	1300	1	0.1	1	27981	2	1	15	E	N
JUL 20,83	JUL 19,83	800	800	1400	1430	1	0.1	1	27984	2	1	****	E	
JUL 22,83	JUL 21,83	800	800	1200	1600	1	3.2	1	27987	2	1	27		N
JUL 29,83	JUL 28,83	800	800	1500	1800	1	1.6	1	27990	2	1	72		
JUL 30,83	JUL 29,83	800	800	1930	2100	1	1.6	1	27993	2	1	84		
AUG 1,83	JUL 31,83	800	800	1900	700	1	7.0	1	27996	2	1	99		
AUG 2,83	AUG 1,83	800	800	1700	1900	1	2.6	1	27999	2	1	U 12	G	
AUG 4,83	AUG 3,83	800	800	2000	800	1	5.8	1	97701	2	1	78		
AUG 7,83	AUG 6,83	800	800	2000	2100	1	3.2	1	97704	2	1	80	A	JH
AUG 9,83	AUG 8,83	800	800	1130	1230	1	28.8	1	97707	2	1	100		
AUG 17,83	AUG 16,83	800	800	600	800	1	2.6	1	97710	2	1	97		HM
AUG 20,83	AUG 19,83	800	800	1400	1630	1	1.8	1	97716	2	1	77	A	
AUG 22,83	AUG 21,83	800	800	2400	800	1	16.4	1	97719	2	1	105		M
AUG 23,83	AUG 22,83	800	830	830	1000	1	0.6	1	97722	2	1	5	E	N
AUG 28,83	AUG 27,83	800	800	1400	1500	1	18.8	1	97725	2	1	108		JC
AUG 29,83	AUG 28,83	800	800	200	230	1	****	1	97728	2	1	****	E	
AUG 30,83	AUG 29,83	800	830	1600	1630	1	0.1	1	97731	2	1	124	E	N
AUG 31,83	AUG 30,83	830	1430	1030	1100	1	0.4	1	97734	2	1	66		
SEP 6,83	SEP 5,83	800	830	820	830	1	1.8	1	56001	2	1	75		
SEP 8,83	SEP 6,83	830	830	830	930	1	4.2	1	56004	2	1	88		Z
SEP 10,83	SEP 9,83	800	800	1700	2430	1	12.8	1	56007	2	1	99		J
SEP 11,83	SEP 10,83	800	800	130	430	1	4.8	1	56010	2	1	89		J
SEP 17,83	SEP 16,83	800	800	830	2330	1	21.5	1	56013	2	1	99		
SEP 18,83	SEP 17,83	800	800	1445	1515	1	0.8	1	56016	2	1	58	B	
SEP 19,83	SEP 18,83	800	800	1030	1500	1	9.2	1	56019	2	1	97		
SEP 21,83	SEP 20,83	800	800	2400	800	1	44.2	1	56022	2	1	102		
SEP 22,83	SEP 21,83	800	800	2230	430	1	4.4	1	56025	2	1	81		JHC
SEP 23,83	SEP 22,83	800	800	2030	100	1	10.0	1	56028	2	1	93		JHCM
SEP 24,83	SEP 23,83	800	830	1400	1730	1	1.9	1	56031	2	1	55		H
SEP 26,83	SEP 25,83	800	830	1930	2300	1	5.4	1	56034	2	1	99		
OCT 4,83	OCT 3,83	830	830	1600	1800	1	16.3	1	56037	2	1	100		HM
OCT 5,83	OCT 4,83	830	800	2000	2230	1	7.9	1	56040	2	1	91		
OCT 6,83	OCT 5,83	800	800	330	730	1	5.4	1	56043	2	1	93		
OCT 7,83	OCT 6,83	800	800	1000	1330	1	3.8	1	56046	2	1	77		JH
OCT 8,83	OCT 7,83	800	800	1830	600	1	23.0	1	56049	2	1	102		
OCT 11,83	OCT 8,83	800	800	****	****	1	1.4	1	56052	2	1	52		Y3
OCT 13,83	OCT 12,83	800	800	930	1400	1	6.2	1	56055	2	1	94		
OCT 14,83	OCT 13,83	800	830	1700	230	1	29.2	1	56058	2	1	108		

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DORSET/DAILY/AEROCHEM #20

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
JUL 5,83	JUL 1,83	1450.0	******	4.35	******	******	******	******
JUL 9,83	JUL 8,83	105.0	******	******	4.43	0.0676	2.50	0.26
JUL 16,83	JUL 15,83	1.0	******	******	******	******	******	******
JUL 20,83	JUL 19,83	******	******	******	******	******	******	******
JUL 22,83	JUL 21,83	57.0	******	******	4.86	0.0386	0.90	0.20
JUL 29,83	JUL 28,83	74.0	******	******	3.55	G 0.3880	G 18.00	G 2.18
JUL 30,83	JUL 29,83	87.0	51.0	******	4.26	0.1000	5.25	0.60
AUG 1,83	JUL 31,83	448.0	35.0	4.10	4.24	0.0864	3.40	0.38
AUG 2,83	AUG 1,83	21.0	******	******	U 6.98	0.0194	******	******
AUG 4,83	AUG 3,83	291.0	53.0	3.97	4.07	0.1162	5.70	0.74
AUG 7,83	AUG 6,83	166.0	******	4.26	U 5.60	0.0280	1.75	0.16
AUG 9,83	AUG 8,83	1857.0	10.8	4.47	4.92	0.0318	1.35	0.07
AUG 17,83	AUG 16,83	162.0	G 142.0	******	3.77	G 0.3120	12.80	G 2.20
AUG 20,83	AUG 19,83	89.0	******	******	5.12	0.0380	3.20	0.91
AUG 22,83	AUG 21,83	1107.0	22.0	4.18	4.55	0.0582	2.20	0.28
AUG 23,83	AUG 22,83	2.0	******	******	******	******	******	******
AUG 28,83	AUG 27,83	1312.0	8.4	4.55	5.24	0.0266	0.90	0.12
AUG 29,83	AUG 28,83	1.0	******	******	******	******	******	******
AUG 30,83	AUG 29,83	8.0	******	******	******	******	******	******
AUG 31,83	AUG 30,83	17.0	******	******	G 5.73	******	******	******
SEP 6,83	SEP 5,83	87.0	******	******	3.94	0.2020	10.10	0.66
SEP 8,83	SEP 6,83	239.0	62.0	3.90	4.02	0.1414	7.15	0.50
SEP 10,83	SEP 9,83	820.0	48.3	3.73	4.17	0.0998	5.60	0.79
SEP 11,83	SEP 10,83	276.0	16.0	4.19	4.71	0.0434	1.70	0.24
SEP 17,83	SEP 16,83	1368.0	24.6	4.12	4.38	0.0672	2.00	0.26
SEP 18,83	SEP 17,83	30.0	******	******	******	******	3.95	0.39
SEP 19,83	SEP 18,83	576.0	34.4	4.01	4.30	0.0816	3.45	0.50
SEP 21,83	SEP 20,83	2910.0	14.5	4.23	4.62	0.0496	1.60	0.13
SEP 22,83	SEP 21,83	230.0	6.7	4.67	G 5.44	0.0228	0.60	0.04
SEP 23,83	SEP 22,83	602.0	4.2	4.75	G 5.38	0.0232	0.20	0.02
SEP 24,83	SEP 23,83	68.0	******	******	5.00	0.0296	1.75	<W 0.01
SEP 26,83	SEP 25,83	345.0	31.8	3.88	4.26	0.0832	2.40	0.64
OCT 4,83	OCT 3,83	1053.0	28.6	4.00	4.36	0.0716	3.60	0.36
OCT 5,83	OCT 4,83	461.0	43.4	3.84	4.12	0.1176	4.50	0.61
OCT 6,83	OCT 5,83	324.0	10.0	4.35	4.79	0.0388	1.05	0.11
OCT 7,83	OCT 6,83	190.0	6.0	4.66	G 5.42	0.0258	0.70	0.06
OCT 8,83	OCT 7,83	1514.0	18.2	4.24	4.50	0.0592	1.20	0.37
OCT 11,83	OCT 8,83	47.0	******	******	4.17	0.1072	2.90	1.00
OCT 13,83	OCT 12,83	376.0	13.6	4.32	4.66	0.0476	0.95	0.22
OCT 14,83	OCT 13,83	2036.0	9.2	4.48	4.77	0.0326	0.80	0.13

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DORSET/DAILY/AEROCHEM #20

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N LAB MG/L	FREE H+ LAB MG/L
JUL 5,83	JUL 1,83	******	******	******	******	******	******	******
JUL 9,83	JUL 8,83	0.27	0.10	0.040	0.075	0.065	0.410	0.0372
JUL 16,83	JUL 15,83	******	******	******	******	******	******	******
JUL 20,83	JUL 19,83	******	******	******	******	******	******	******
JUL 22,83	JUL 21,83	******	0.32	******	******	******	******	0.0138
JUL 29,83	JUL 28,83	******	G 0.76	******	******	******	1.120	0.2818
JUL 30,83	JUL 29,83	******	0.39	******	******	******	0.780	0.0550
AUG 1,83	JUL 31,83	0.08	0.11	0.025	0.060	0.040	0.350	0.0575
AUG 2,83	AUG 1,83	******	******	******	******	******	******	U 0.0001
AUG 4,83	AUG 3,83	0.36	0.19	0.085	0.075	0.050	0.820	0.0851
AUG 7,83	AUG 6,83	0.13	0.15	0.045	U 0.180	0.060	0.590	U 0.0025
AUG 9,83	AUG 8,83	0.12	0.03	0.045	0.060	0.040	0.190	0.0120
AUG 17,83	AUG 16,83	G 1.35	0.57	G 0.285	0.120	0.110	0.930	0.1698
AUG 20,83	AUG 19,83	0.93	0.39	0.125	0.120	0.175	0.910	0.0076
AUG 22,83	AUG 21,83	0.12	0.12	0.025	<W 0.005	0.025	0.228	0.0282
AUG 23,83	AUG 22,83	******	******	******	******	******	******	******
AUG 28,83	AUG 27,83	0.14	0.09	0.020	0.040	0.030	0.184	0.0058
AUG 29,83	AUG 28,83	******	******	******	******	******	******	******
AUG 30,83	AUG 29,83	******	******	******	******	******	******	******
AUG 31,83	AUG 30,83	******	******	******	******	******	******	G 0.0019
SEP 6,83	SEP 5,83	0.63	0.27	0.095	0.120	0.070	0.860	0.1148
SEP 8,83	SEP 6,83	0.48	0.19	0.085	0.055	0.070	0.660	0.0955
SEP 10,83	SEP 9,83	1.03	0.32	0.160	0.075	0.180	0.380	0.0676
SEP 11,83	SEP 10,83	0.25	0.10	0.040	0.035	0.065	0.248	0.0195
SEP 17,83	SEP 16,83	0.11	0.09	0.010	D 0.075	0.045	0.158	0.0417
SEP 18,83	SEP 17,83	******	U 0.75	******	******	******	******	******
SEP 19,83	SEP 18,83	0.31	0.13	0.035	0.075	0.055	0.440	0.0501
SEP 21,83	SEP 20,83	0.09	0.04	0.010	0.020	0.030	0.152	0.0240
SEP 22,83	SEP 21,83	0.14	0.23	0.025	0.080	D 0.195	0.068	G 0.0036
SEP 23,83	SEP 22,83	0.07	0.05	<W 0.005	0.030	0.055	0.024	G 0.0042
SEP 24,83	SEP 23,83	0.24	0.34	0.050	0.095	G 0.220	0.010	0.0100
SEP 26,83	SEP 25,83	0.27	0.15	0.030	0.030	0.040	0.230	0.0550
OCT 4,83	OCT 3,83	0.32	0.13	U 0.800	0.045	0.035	0.550	0.0437
OCT 5,83	OCT 4,83	0.29	0.11	0.025	0.045	0.020	0.510	0.0759
OCT 6,83	OCT 5,83	0.09	0.03	0.010	0.035	0.025	0.152	0.0162
OCT 7,83	OCT 6,83	0.14	0.20	0.065	0.110	0.130	0.132	G 0.0038
OCT 8,83	OCT 7,83	0.14	0.05	0.030	0.020	<T 0.005	0.124	0.0316
OCT 11,83	OCT 8,83	******	0.23	******	******	******	******	0.0676
OCT 13,83	OCT 12,83	0.06	0.19	0.025	0.060	0.130	0.092	0.0219
OCT 14,83	OCT 13,83	0.08	0.06	0.010	0.015	<W 0.005	0.070	0.0170

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DORSET/DAILY/AEROCHEM #20

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
OCT 15,83	OCT 14,83	830	830	1330	2330	1	13.4	1	56061	2	1	99		
OCT 17,83	OCT 16,83	800	800	1530	1600	1	0.1	1	56064	2	1	****	KE	
OCT 23,83	OCT 22,83	900	900	430	900	1	9.8	1	56067	2	1	99		J
OCT 24,83	OCT 23,83	900	800	900	1800	1	4.6	1	56070	2	1	66		M
OCT 26,83	OCT 25,83	830	830	2100	100	1	2.0	1	56073	2	1	32		N
OCT 27,83	OCT 26,83	830	800	1400	2100	1	3.4	1	56076	2	1	84		JC
OCT 29,83	OCT 28,83	830	830	1930	2030	1	2.8	1	56079	2	1	83		
NOV 2,83	NOV 1,83	830	830	500	600	1	1.0	1	56082	2	1	65		
NOV 3,83	NOV 2,83	830	830	900	2000	1	13.3	1	56085	2	1	96		M
NOV 4,83	NOV 3,83	830	800	830	300	2	9.1	2	56088	2	1	70		JHCM
NOV 12,83	NOV 10,83	800	800	1700	1800	3	16.0	2	56091	2	1	65		Y2
NOV 16,83	NOV 15,83	830	830	1800	830	2	8.4	2	56094	2	1	54		
NOV 17,83	NOV 16,83	830	830	830	2400	2	7.4	2	56097	2	1	65		
NOV 20,83	NOV 19,83	800	800	700	800	1	0.2	2	56100	2	1	124		N
NOV 21,83	NOV 20,83	800	800	1600	100	1	14.7	2	56103	2	1	100		J
NOV 22,83	NOV 21,83	800	800	1000	1500	1	2.5	2	56106	2	1	114		
NOV 24,83	NOV 23,83	800	800	1800	600	1	5.1	2	56109	2	1	97		
NOV 26,83	NOV 25,83	800	800	800	300	2	0.9	2	56112	2	1	36	C	N
NOV 29,83	NOV 28,83	800	800	1200	300	4	9.5	2	56115	2	1	91		
NOV 30,83	NOV 29,83	800	800	1200	800	2	3.9	2	56118	2	1	35		N
DEC 1,83	NOV 30,83	800	830	****	****	2	9.5	2	56121	2	1	74		JHM
DEC 2,83	DEC 1,83	830	800	830	1900	2	1.8	2	56124	2	1	22		N
DEC 3,83	DEC 2,83	800	800	****	****	2	3.5	2	56127	2	1	68		
DEC 5,83	DEC 4,83	900	900	****	****	2	0.7	2	56130	2	1	35		N
DEC 6,83	DEC 5,83	900	900	1500	900	2	4.1	2	56133	2	1	53		M
DEC 7,83	DEC 6,83	900	830	900	830	2	20.2	2	56136	2	1	62		
DEC 8,83	DEC 7,83	830	800	830	1200	2	0.1	2	56139	2	1	****	EK	
DEC 9,83	DEC 8,83	800	800	1600	800	2	5.6	2	56142	2	1	75		
DEC 10,83	DEC 9,83	800	800	800	800	2	2.6	2	56145	2	1	27		N
DEC 11,83	DEC 10,83	800	800	800	1200	2	0.1	2	56148	2	1	****	EK	
DEC 12,83	DEC 11,83	800	830	2400	830	3	11.9	2	56151	2	1	35		NM
DEC 13,83	DEC 12,83	830	830	830	1800	3	9.8	2	56154	2	1	81		
DEC 15,83	DEC 14,83	800	800	1630	2200	3	2.3	2	56157	2	1	87		
DEC 16,83	DEC 15,83	800	830	600	830	2	1.2	2	56160	2	1	24		N
DEC 18,83	DEC 16,83	830	800	****	****	2	3.8	2	56163	2	1	23		NZ
DEC 19,83	DEC 18,83	800	800	****	****	2	1.0	2	56166	2	1	40		N
DEC 22,83	DEC 21,83	800	1000	1300	1000	3	27.9	2	56169	2	1	43		NM
DEC 23,83	DEC 22,83	1000	900	1000	600	2	7.5	2	56172	2	1	56		
DEC 24,83	DEC 23,83	900	900	1200	300	2	5.2	2	56175	2	1	53		
DEC 26,83	DEC 25,83	900	900	****	****	2	0.6	2	56178	2	1	****	EK	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DORSET/DAILY/AEROCHEM #20

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
OCT 15,83	OCT 14,83	858.0	10.0	4.58	4.74	0.0324	1.10	0.20
OCT 17,83	OCT 16,83	******	******	******	******	******	******	******
OCT 23,83	OCT 22,83	625.0	13.0	4.07	4.67	0.0420	0.85	0.25
OCT 24,83	OCT 23,83	196.0	13.5	4.25	4.66	0.0442	1.05	0.20
OCT 26,83	OCT 25,83	42.0	******	******	4.14	D 0.1134	3.60	0.88
OCT 27,83	OCT 26,83	184.0	3.8	4.78	U 6.13	0.0176	0.30	<W 0.01
OCT 29,83	OCT 28,83	149.0	15.1	******	4.71	0.0446	2.00	0.16
NOV 2,83	NOV 1,83	42.0	******	******	4.29	0.1004	4.15	1.02
NOV 3,83	NOV 2,83	822.0	34.5	3.87	4.26	0.0960	3.70	0.59
NOV 4,83	NOV 3,83	412.0	3.6	G 4.88	G 5.77	0.0174	0.25	<W 0.01
NOV 12,83	NOV 10,83	672.0	46.7	3.84	4.02	0.1248	3.60	0.97
NOV 16,83	NOV 15,83	295.0	17.6	4.23	4.48	0.0506	0.85	0.48
NOV 17,83	NOV 16,83	311.0	6.7	4.56	5.03	0.0242	0.35	0.09
NOV 20,83	NOV 19,83	16.0	******	******	3.91	0.1490	******	******
NOV 21,83	NOV 20,83	951.0	25.0	3.75	4.37	0.0624	1.95	0.44
NOV 22,83	NOV 21,83	183.0	20.5	4.25	4.60	0.0438	1.95	0.37
NOV 24,83	NOV 23,83	320.0	58.9	3.62	3.94	0.1422	4.55	1.35
NOV 26,83	NOV 25,83	21.0	******	******	G 5.77	0.0226	******	******
NOV 29,83	NOV 28,83	558.0	23.8	4.09	4.36	0.0648	1.60	0.44
NOV 30,83	NOV 29,83	88.0	26.5	******	4.50	0.0502	1.65	0.60
DEC 1,83	NOV 30,83	451.0	6.0	4.57	G 5.14	B 0.5260	0.50	0.10
DEC 2,83	DEC 1,83	26.0	******	******	G 5.32	0.0254	******	******
DEC 3,83	DEC 2,83	154.0	25.1	******	4.36	0.0722	1.75	0.77
DEC 5,83	DEC 4,83	16.0	******	******	U 7.46	0.0280	******	******
DEC 6,83	DEC 5,83	141.0	17.1	******	4.55	0.0586	0.50	0.54
DEC 7,83	DEC 6,83	808.0	6.7	4.61	4.99	0.0284	0.30	0.15
DEC 8,83	DEC 7,83	******	******	******	******	******	******	******
DEC 9,83	DEC 8,83	270.0	24.4	4.13	4.35	0.0682	0.80	0.80
DEC 10,83	DEC 9,83	46.0	25.5	******	4.45	0.0604	2.00	0.66
DEC 11,83	DEC 10,83	******	******	******	******	******	******	******
DEC 12,83	DEC 11,83	269.0	11.5	4.56	4.73	0.0384	0.95	0.16
DEC 13,83	DEC 12,83	513.0	16.0	D 4.21	4.53	0.0452	1.45	0.14
DEC 15,83	DEC 14,83	129.0	46.5	******	4.05	0.1110	3.15	0.89
DEC 16,83	DEC 15,83	19.0	******	******	3.83	0.1778	******	******
DEC 18,83	DEC 16,83	58.0	******	******	4.28	0.0694	0.80	0.91
DEC 19,83	DEC 18,83	26.0	******	******	G 6.13	0.0192	******	******
DEC 22,83	DEC 21,83	782.0	13.8	4.33	4.58	0.0428	0.75	0.35
DEC 23,83	DEC 22,83	271.0	22.6	4.16	4.34	0.0630	1.80	0.47
DEC 24,83	DEC 23,83	177.0	7.5	4.57	4.92	0.0286	0.30	0.21
DEC 26,83	DEC 25,83	******	******	******	******	******	******	******

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DORSET/DAILY/AEROCHEM #20 PAGE : 12

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
OCT 15,83	OCT 14,83	0.12	0.06	0.020	0.025	<W 0.005	0.226	0.0182
OCT 17,83	OCT 16,83	******	******	******	******	******	******	******
OCT 23,83	OCT 22,83	0.09	0.11	0.010	0.020	0.055	0.062	0.0214
OCT 24,83	OCT 23,83	0.12	0.15	0.010	<T 0.010	0.065	<W 0.002	0.0219
OCT 26,83	OCT 25,83	******	D 0.54	******	******	******	******	0.0724
OCT 27,83	OCT 26,83	0.09	0.12	0.025	<T 0.010	0.130	<W 0.002	U 0.0007
OCT 29,83	OCT 28,83	0.18	0.13	0.040	0.100	0.095	0.250	0.0195
NOV 2,83	NOV 1,83	******	0.57	******	******	******	******	0.0513
NOV 3,83	NOV 2,83	0.07	0.16	0.010	0.035	0.060	0.490	0.0550
NOV 4,83	NOV 3,83	0.05	0.04	0.010	<T 0.005	0.025	<T 0.002	G 0.0017
NOV 12,83	NOV 10,83	0.11	0.23	0.015	0.030	0.060	0.380	0.0955
NOV 16,83	NOV 15,83	0.08	0.12	0.020	0.040	0.080	0.036	0.0331
NOV 17,83	NOV 16,83	0.06	0.08	0.010	<W 0.005	0.030	<T 0.002	0.0093
NOV 20,83	NOV 19,83	******	******	******	******	******	******	0.1230
NOV 21,83	NOV 20,83	0.11	0.21	0.020	0.030	0.075	0.156	0.0427
NOV 22,83	NOV 21,83	0.16	0.20	0.035	0.040	0.080	0.490	0.0251
NOV 24,83	NOV 23,83	0.36	0.47	0.040	0.075	0.220	0.510	0.1148
NOV 26,83	NOV 25,83	******	******	******	******	******	******	G 0.0017
NOV 29,83	NOV 28,83	0.08	0.07	0.010	<T 0.015	0.040	0.080	0.0437
NOV 30,83	NOV 29,83	0.23	0.38	0.040	0.055	D 0.190	0.206	0.0316
DEC 1,83	NOV 30,83	0.06	0.08	0.015	<T 0.010	0.040	0.024	G 0.0072
DEC 2,83	DEC 1,83	******	******	******	******	******	******	G 0.0048
DEC 3,83	DEC 2,83	0.21	0.20	0.035	0.030	0.080	0.234	0.0437
DEC 5,83	DEC 4,83	******	******	******	******	******	******	U 0.0000
DEC 6,83	DEC 5,83	0.13	0.19	0.030	<T 0.005	0.085	0.008	0.0282
DEC 7,83	DEC 6,83	0.05	0.04	0.010	<W 0.005	0.030	0.006	0.0102
DEC 8,83	DEC 7,83	******	******	******	******	******	******	******
DEC 9,83	DEC 8,83	0.19	0.21	0.030	0.020	0.070	0.118	0.0447
DEC 10,83	DEC 9,83	******	0.68	******	******	******	******	0.0355
DEC 11,83	DEC 10,83	******	******	******	******	******	******	******
DEC 12,83	DEC 11,83	0.10	0.30	0.020	<T 0.015	0.140	<T 0.002	0.0186
DEC 13,83	DEC 12,83	0.10	0.08	0.010	<T 0.015	0.040	0.014	0.0295
DEC 15,83	DEC 14,83	0.17	0.34	0.030	0.070	0.140	0.260	0.0891
DEC 16,83	DEC 15,83	******	******	******	******	******	******	0.1479
DEC 18,83	DEC 16,83	******	0.42	******	******	******	******	0.0525
DEC 19,83	DEC 18,83	******	******	******	******	******	******	G 0.0007
DEC 22,83	DEC 21,83	0.05	0.08	0.015	<T 0.010	0.065	D 0.012	0.0263
DEC 23,83	DEC 22,83	0.11	0.16	0.035	0.045	0.150	0.146	0.0457
DEC 24,83	DEC 23,83	0.13	0.17	0.040	<W 0.005	0.080	<W 0.002	0.0120
DEC 26,83	DEC 25,83	******	******	******	******	******	******	******

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DORSET/DAILY/AEROCHEM #20 PAGE : 13

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
DEC 27,83	DEC 26,83	900	900	****	****	2	1.6	2	56181	2	1	1	E	N
DEC 28,83	DEC 27,83	900	900	900	900	2	2.0	2	56184	2	1	24		N
DEC 29,83	DEC 28,83	900	900	900	2400	2	9.8	2	56187	2	1	83		M
JAN 2,84	DEC 30,83	800	900	1900	300	2	4.9	2	56190	2	1	60		Z

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DORSET/DAILY/AEROCHEM #20

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
DEC 27,83	DEC 26,83	2.0	******	******	******	******	******	******
DEC 28,83	DEC 27,83	31.0	******	******	4.21	0.0822	0.80	1.10
DEC 29,83	DEC 28,83	523.0	8.5	4.53	4.85	0.0316	0.35	0.22
JAN 2,84	DEC 30,83	190.0	33.7	******	4.11	0.0990	0.55	1.11

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DORSET/DAILY/AEROCHEM #20 PAGE : 15

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
DEC 27,83	DEC 26,83	******	******	******	******	******	******	******
DEC 28,83	DEC 27,83	******	0.67	******	******	******	******	0.0617
DEC 29,83	DEC 28,83	0.04	0.08	0.010	<W 0.005	0.025	0.018	0.0141
JAN 2,84	DEC 30,83	0.19	0.36	0.030	<W 0.005	0.140	0.008	0.0776

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NITHGROVE/DAILY/AEROCHEM #07

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES		SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
JAN 5,83	JAN 4,83	800	800	630	800	2	1.1	2	28215	2	1		19		N
JAN 7,83	JAN 6,83	745	745	530	745	2	9.9	2	28216	2	1		62	C	
JAN 8,83	JAN 7,83	745	800	745	1000	2	6.1	2	28217	2	1		56	C	
JAN 11,83	JAN 10,83	730	730	1300	1500	1	24.3	2	28218	2	1		96	B	
JAN 12,83	JAN 11,83	730	730	730	930	1	5.6	2	28219	2	1		62	C	
JAN 15,83	JAN 14,83	730	730	200	430	2	5.5	2	28220	2	1	U	3	CL	N
JAN 22,83	JAN 21,83	730	730	1400	1500	2	1.1	2	28221	2	1		****	EK	
JAN 24,83	JAN 23,83	800	800	1700	1800	2	3.3	2	28222	2	1		****		
JAN 25,83	JAN 24,83	800	800	800	1000	2	****	2	28223	2	1		****		
JAN 26,83	JAN 25,83	800	800	1600	1700	2	0.3	2	28224	2	1		140		N
JAN 31,83	JAN 30,83	800	800	1200	1500	2	7.3	2	28225	2	1		48		NJCM
FEB 3,83	FEB 2,83	730	730	900	1200	1	24.7	2	28226	2	1		82		
FEB 4,83	FEB 3,83	730	730	1100	1300	3	5.3	2	28227	2	1		72		
FEB 8,83	FEB 7,83	730	730	830	1100	2	1.7	2	28228	2	1		36		N
FEB 17,83	FEB 16,83	730	730	600	730	2	3.7	2	28229	2	1		****	EK	
FEB 19,83	FEB 18,83	800	800	500	600	2	1.1	2	28230	2	1		****	EK	
FEB 23,83	FEB 22,83	730	730	1600	2000	2	****	2	28231	2	1		****	EK	
FEB 24,83	FEB 23,83	730	730	1300	1500	2	1.1	2	28232	2	1		52		
MAR 4,83	MAR 3,83	730	****	2300	200	2	6.9	2	28233	2	1		****	EK	
MAR 5,83	MAR 4,83	730	****	1130	1300	1	0.9	2	28234	2	1		116		
MAR 7,83	MAR 6,83	730	****	100	200	1	0.7	2	28235	2	1		91		
MAR 9,83	MAR 8,83	730	730	2300	100	1	5.9	2	28236	2	1		85		
MAR 10,83	MAR 9,83	730	730	1630	1800	1	2.5	2	28237	2	1		100		
MAR 18,83	MAR 17,83	730	800	2200	2400	1	7.9	2	28238	2	1	U	77	G	
MAR 20,83	MAR 19,83	800	800	1200	1600	1	6.1	2	28239	2	1		71		HM
MAR 22,83	MAR 21,83	730	730	830	1400	2	20.1	2	28240	2	1	U	6	FI	N
MAR 28,83	MAR 27,83	730	830	600	730	2	1.7	2	28241	2	1		****	EKF	
MAR 29,83	MAR 28,83	830	730	730	1030	1	6.1	2	28242	2	1		93		
APR 3,83	APR 2,83	800	800	2400	400	3	12.7	2	28243	2	1		58		HCM
APR 4,83	APR 3,83	800	800	2000	2200	3	2.7	2	28244	2	1		83		HCM
APR 5,83	APR 4,83	800	800	1430	1600	1	0.9	2	28245	2	1		34		N
APR 7,83	APR 6,83	730	730	530	730	1	4.3	2	28246	2	1		111		
APR 8,83	APR 7,83	730	830	730	1000	1	4.1	2	28247	2	1		120		NM
APR 10,83	APR 9,83	800	900	600	900	2	17.5	2	28248	2	1		****	EK	
APR 11,83	APR 10,83	900	930	900	1000	1	0.5	2	28249	2	1		62		
APR 12,83	APR 11,83	930	730	1430	1630	1	7.5	2	28250	2	1		102		
APR 15,83	APR 13,83	730	800	1600	1630	1	15.9	2	28251	2	1		114		Y2
APR 17,83	APR 16,83	700	800	1400	1430	3	0.2	2	28252	2	1		78		
APR 20,83	APR 19,83	730	800	500	600	2	0.4	2	28253	2	1		****	EK	
APR 21,83	APR 20,83	800	730	300	600	2	1.4	2	28254	2	1		****	EK	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NITHGROVE/DAILY/AEROCHEM #07 PAGE : 2

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
JAN 5,83	JAN 4,83	14.0	******	******	G 5.36	0.0294	******	******
JAN 7,83	JAN 6,83	395.0	24.5	4.21	4.27	0.0734	1.15	0.60
JAN 8,83	JAN 7,83	221.0	21.8	4.32	4.39	0.0658	1.80	0.52
JAN 11,83	JAN 10,83	1499.0	14.7	4.36	4.50	0.0558	1.05	G 0.22
JAN 12,83	JAN 11,83	225.0	31.0	******	4.24	0.0902	2.00	0.87
JAN 15,83	JAN 14,83	13.0	******	******	B 6.74	0.0342	******	******
JAN 22,83	JAN 21,83	******	******	******	******	******	******	******
JAN 24,83	JAN 23,83	******	******	******	******	******	******	******
JAN 25,83	JAN 24,83	85.0	******	******	4.36	0.0642	1.60	0.33
JAN 26,83	JAN 25,83	27.0	******	******	G 6.93	0.0260	1.05	0.11
JAN 31,83	JAN 30,83	228.0	35.2	4.26	3.92	0.1390	2.80	0.58
FEB 3,83	FEB 2,83	1304.0	22.5	U 4.32	4.20	0.0824	1.40	0.33
FEB 4,83	FEB 3,83	247.0	19.5	4.38	4.30	0.0716	1.30	0.35
FEB 8,83	FEB 7,83	40.0	******	******	4.22	0.0772	0.35	0.80
FEB 17,83	FEB 16,83	******	******	******	******	******	******	******
FEB 19,83	FEB 18,83	******	******	******	******	******	******	******
FEB 23,83	FEB 22,83	******	******	******	******	******	******	******
FEB 24,83	FEB 23,83	37.0	******	******	4.82	0.0336	1.95	0.24
MAR 4,83	MAR 3,83	******	******	******	******	******	******	******
MAR 5,83	MAR 4,83	67.0	******	******	3.72	0.2096	9.15	2.00
MAR 7,83	MAR 6,83	41.0	******	******	3.98	0.1296	6.25	0.96
MAR 9,83	MAR 8,83	325.0	24.6	******	4.36	0.0628	1.50	0.41
MAR 10,83	MAR 9,83	161.0	74.5	******	3.82	0.1808	5.60	0.98
MAR 18,83	MAR 17,83	391.0	******	U 5.05	4.96	0.0304	0.45	0.17
MAR 20,83	MAR 19,83	279.0	******	B 5.05	G 5.38	0.0242	0.20	0.08
MAR 22,83	MAR 21,83	79.0	******	******	U 6.06	0.0188	0.15	0.05
MAR 28,83	MAR 27,83	******	******	******	******	******	******	******
MAR 29,83	MAR 28,83	365.0	20.6	4.41	4.42	0.0678	1.25	0.31
APR 3,83	APR 2,83	473.0	6.6	G 5.05	G 5.25	0.0226	0.45	0.15
APR 4,83	APR 3,83	145.0	17.7	******	U 5.60	0.0262	1.30	0.44
APR 5,83	APR 4,83	20.0	******	******	******	******	6.50	0.56
APR 7,83	APR 6,83	307.0	34.2	4.20	4.35	0.0730	3.65	0.44
APR 8,83	APR 7,83	316.0	39.2	4.14	4.24	0.0902	3.50	0.50
APR 10,83	APR 9,83	******	******	******	******	******	******	******
APR 11,83	APR 10,83	20.0	******	******	******	******	4.90	0.84
APR 12,83	APR 11,83	495.0	34.5	4.13	4.24	0.0858	3.10	0.33
APR 15,83	APR 13,83	1168.0	41.2	4.07	4.17	0.0980	3.95	0.53
APR 17,83	APR 16,83	10.0	******	******	******	******	******	******
APR 20,83	APR 19,83	******	******	******	******	******	******	******
APR 21,83	APR 20,83	******	******	******	******	******	******	******

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NITHGROVE/DAILY/AEROCHEM #07 PAGE : 3

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
JAN 5,83	JAN 4,83	******	******	******	******	******	******	G 0.0044
JAN 7,83	JAN 6,83	0.03	0.13	0.010	0.020	0.015	0.156	0.0537
JAN 8,83	JAN 7,83	0.06	0.12	0.025	0.075	0.040	0.400	0.0407
JAN 11,83	JAN 10,83	<T 0.02	0.08	0.005	U 0.025	<T 0.010	0.052	0.0316
JAN 12,83	JAN 11,83	0.06	0.13	0.020	0.045	0.040	0.540	0.0575
JAN 15,83	JAN 14,83	******	******	******	******	******	******	B 0.0002
JAN 22,83	JAN 21,83	******	******	******	******	******	******	******
JAN 24,83	JAN 23,83	******	******	******	******	******	******	******
JAN 25,83	JAN 24,83	0.10	0.13	0.025	0.100	0.055	******	0.0437
JAN 26,83	JAN 25,83	******	******	******	******	******	******	G 0.0001
JAN 31,83	JAN 30,83	0.10	0.17	<W 0.005	0.065	0.050	0.364	0.1202
FEB 3,83	FEB 2,83	0.02	0.04	<T 0.005	0.025	0.020	0.058	0.0631
FEB 4,83	FEB 3,83	0.10	0.06	<W 0.005	0.065	0.040	0.072	0.0501
FEB 8,83	FEB 7,83	******	0.29	******	******	******	******	0.0603
FEB 17,83	FEB 16,83	******	******	******	******	******	******	******
FEB 19,83	FEB 18,83	******	******	******	******	******	******	******
FEB 23,83	FEB 22,83	******	******	******	******	******	******	******
FEB 24,83	FEB 23,83	******	******	******	******	******	******	0.0151
MAR 4,83	MAR 3,83	******	******	******	******	******	******	******
MAR 5,83	MAR 4,83	G 0.76	0.44	D 0.105	G 0.255	0.205	******	0.1905
MAR 7,83	MAR 6,83	******	G 0.83	******	******	******	******	0.1047
MAR 9,83	MAR 8,83	0.10	0.05	0.015	0.040	0.040	0.068	0.0437
MAR 10,83	MAR 9,83	0.14	0.18	0.020	G 0.170	0.100	0.178	0.1514
MAR 18,83	MAR 17,83	0.09	0.14	0.015	0.100	0.115	0.052	0.0110
MAR 20,83	MAR 19,83	0.08	0.04	D 0.010	0.030	0.040	0.076	G 0.0042
MAR 22,83	MAR 21,83	0.17	U 0.08	U 0.015	U 0.070	U 0.100	******	U 0.0009
MAR 28,83	MAR 27,83	******	******	******	******	******	******	******
MAR 29,83	MAR 28,83	0.06	0.05	<W 0.005	0.045	0.015	0.106	0.0380
APR 3,83	APR 2,83	0.10	0.05	<W 0.005	0.030	0.040	0.044	G 0.0056
APR 4,83	APR 3,83	0.26	U 0.32	0.020	U 0.305	U 0.220	0.014	U 0.0025
APR 5,83	APR 4,83	******	U 1.38	******	******	******	******	******
APR 7,83	APR 6,83	0.59	0.26	0.065	G 0.235	0.200	0.086	0.0447
APR 8,83	APR 7,83	0.15	D 0.18	0.005	0.115	0.045	0.266	0.0575
APR 10,83	APR 9,83	******	******	******	******	******	******	******
APR 11,83	APR 10,83	******	0.60	******	******	******	******	******
APR 12,83	APR 11,83	0.05	0.08	0.025	0.050	0.015	0.184	0.0575
APR 15,83	APR 13,83	0.29	0.18	0.030	0.045	0.070	0.348	0.0676
APR 17,83	APR 16,83	******	******	******	******	******	******	******
APR 20,83	APR 19,83	******	******	******	******	******	******	******
APR 21,83	APR 20,83	******	******	******	******	******	******	******

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NITHGROVE/DAILY/AEROCHEM #07 PAGE : 4

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES		SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
APR 22,83	APR 21,83	730	730	900	1100	2	0.2	2	28255	2	1		78		
APR 29,83	APR 28,83	730	730	1730	1930	1	9.6	2	28256	2	1		99		T
MAY 2,83	MAY 1,83	730	800	400	600	1	25.8	2	28257	2	1		111		C
MAY 3,83	MAY 2,83	800	800	1530	1630	1	14.8	2	28258	2	1		100		
MAY 4,83	MAY 3,83	800	800	1100	1230	1	3.2	2	28259	2	1		19		N
MAY 7,83	MAY 6,83	730	730	300	430	1	20.2	1	28260	2	1		92		
MAY 8,83	MAY 7,83	730	800	1630	2030	1	25.8	1	28261	2	1		148		N
MAY 15,83	MAY 14,83	730	800	2000	2330	1	14.0	1	28262	2	1		90		
MAY 20,83	MAY 19,83	730	730	1600	2000	1	14.2	1	28263	2	1		96		
MAY 23,83	MAY 22,83	800	800	1640	1800	1	19.0	1	28264	2	1	U	124	H	N
MAY 24,83	MAY 23,83	800	730	1700	1800	1	3.0	1	28265	2	1		33		N
MAY 26,83	MAY 25,83	730	700	1330	1430	1	12.4	1	28266	2	1		74		
MAY 27,83	MAY 26,83	700	715	1200	1315	1	2.0	1	28267	2	1		39		N
MAY 30,83	MAY 29,83	730	730	1600	1730	1	6.4	1	28268	2	1		83		
JUN 1,83	MAY 30,83	730	700	1400	1500	1	11.4	1	28269	2	1		91		Y2
JUN 8,83	JUN 7,83	700	700	800	830	1	1.0	1	28270	2	1		59		
JUN 10,83	JUN 9,83	700	700	2100	2200	1	8.1	1	28271	2	1		89		
JUN 16,83	JUN 15,83	730	800	1700	1800	1	7.8	1	28272	2	1		91		
JUN 26,83	JUN 25,83	730	800	600	630	1	3.8	1	28273	2	1		61		
JUN 27,83	JUN 26,83	800	730	****	****	1	4.8	1	28274	2	1		52		
JUL 5,83	JUL 4,83	800	730	1720	2000	1	16.4	1	28275	2	1		93		HM
JUL 9,83	JUL 8,83	730	730	2330	30	1	8.0	1	28276	2	1		49		NHM
JUL 21,83	JUL 20,83	730	730	1230	1330	1	2.2	1	28277	2	1		70		
JUL 29,83	JUL 28,83	730	730	740	830	1	3.0	1	28278	2	1		17		N
JUL 30,83	JUL 29,83	730	730	1830	2130	1	2.8	1	28279	2	1		65		
AUG 1,83	JUL 31,83	730	730	130	200	1	12.2	1	28280	2	1		95		
AUG 4,83	AUG 3,83	730	730	2330	100	1	4.8	1	28281	2	1		63		
AUG 7,83	AUG 6,83	730	730	1900	2000	1	6.6	1	28282	2	1		78		
AUG 9,83	AUG 8,83	730	730	1130	1300	1	17.2	1	28283	2	1	U	14	F	
AUG 17,83	AUG 16,83	730	730	530	730	1	2.4	1	28284	2	1		91	A	
AUG 20,83	AUG 19,83	730	800	1530	1600	1	1.4	1	28285	2	1		62		
AUG 22,83	AUG 21,83	730	730	530	630	1	15.0	1	28286	2	1		102		
AUG 31,83	AUG 30,83	730	730	1000	1100	1	2.0	1	28287	2	1		90		
SEP 7,83	SEP 6,83	730	730	900	930	1	3.6	1	28288	2	1		79		C
SEP 8,83	SEP 7,83	730	730	830	930	1	1.8	1	28289	2	1		73		
SEP 10,83	SEP 9,83	730	730	1700	1800	1	4.8	1	28290	2	1	U	412	AP	N
SEP 11,83	SEP 10,83	730	730	100	200	1	3.8	1	28291	2	1		93		
SEP 17,83	SEP 16,83	800	800	930	1730	1	18.6	1	28292	2	1		99		TC
SEP 19,83	SEP 18,83	730	800	1000	1400	1	10.8	1	28293	2	1		115	B	
SEP 21,83	SEP 20,83	730	715	2400	715	1	31.0	1	28294	2	1		116		J

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NITHGROVE/DAILY/AEROCHEM #07

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
APR 22,83	APR 21,83	10.0	******	******	******	******	******	******
APR 29,83	APR 28,83	611.0	28.5	4.24	4.38	0.0398	2.95	0.37
MAY 2,83	MAY 1,83	1838.0	13.0	4.55	4.83	0.0738	1.15	0.12
MAY 3,83	MAY 2,83	953.0	16.4	4.56	4.68	0.0462	1.75	0.28
MAY 4,83	MAY 3,83	41.0	******	******	******	******	1.30	0.12
MAY 7,83	MAY 6,83	1204.0	44.0	4.01	4.09	0.1280	3.90	0.89
MAY 8,83	MAY 7,83	2453.0	21.6	4.41	4.55	0.0552	2.60	0.36
MAY 15,83	MAY 14,83	816.0	30.6	4.19	4.33	0.0740	3.10	0.36
MAY 20,83	MAY 19,83	875.0	13.0	4.62	4.76	0.0386	1.15	0.16
MAY 23,83	MAY 22,83	1520.0	24.8	4.34	4.41	0.0656	2.25	0.28
MAY 24,83	MAY 23,83	65.0	******	******	******	******	1.05	0.04
MAY 26,83	MAY 25,83	595.0	D 29.0	4.24	D 4.39	D 0.0716	2.40	0.47
MAY 27,83	MAY 26,83	50.0	******	******	5.07	0.0288	0.90	0.03
MAY 30,83	MAY 29,83	341.0	32.1	4.16	4.22	0.0902	3.45	0.31
JUN 1,83	MAY 30,83	665.0	24.1	4.36	4.46	0.0626	2.30	0.42
JUN 8,83	JUN 7,83	38.0	******	******	G 5.81	0.0260	1.85	0.19
JUN 10,83	JUN 9,83	465.0	38.9	4.24	4.41	0.0752	4.80	0.98
JUN 16,83	JUN 15,83	455.0	G 151.0	3.55	3.56	G 0.3560	G 15.80	1.53
JUN 26,83	JUN 25,83	150.0	******	******	4.12	0.1112	6.90	0.65
JUN 27,83	JUN 26,83	163.0	******	3.93	4.06	0.1284	6.40	D 0.52
JUL 5,83	JUL 4,83	986.0	14.0	4.70	4.75	D 0.0376	0.85	0.16
JUL 9,83	JUL 8,83	252.0	6.7	4.86	5.16	0.0248	0.70	0.03
JUL 21,83	JUL 20,83	100.0	4.3	******	G 6.28	0.0180	0.40	<W 0.01
JUL 29,83	JUL 28,83	34.0	******	******	******	******	******	******
JUL 30,83	JUL 29,83	118.0	27.2	******	4.47	0.0664	3.30	0.36
AUG 1,83	JUL 31,83	746.0	D 15.7	4.48	4.66	0.0452	D 1.70	0.17
AUG 4,83	AUG 3,83	196.0	34.5	4.14	4.26	0.0820	3.90	0.42
AUG 7,83	AUG 6,83	333.0	12.7	4.44	4.73	0.0402	1.30	0.09
AUG 9,83	AUG 8,83	160.0	15.3	******	4.67	0.0434	2.00	0.07
AUG 17,83	AUG 16,83	141.0	U 144.0	******	U 3.72	G 0.3480	U 14.90	U 2.20
AUG 20,83	AUG 19,83	56.0	******	******	4.67	0.0580	3.75	1.30
AUG 22,83	AUG 21,83	983.0	18.3	4.42	4.59	0.0528	1.95	0.20
AUG 31,83	AUG 30,83	116.0	12.7	******	D 5.00	0.0356	1.35	0.26
SEP 7,83	SEP 6,83	184.0	28.0	3.72	3.86	0.1958	10.60	0.74
SEP 8,83	SEP 7,83	85.0	5.9	******	G 5.65	0.0228	0.65	0.06
SEP 10,83	SEP 9,83	1268.0	54.0	3.91	4.13	0.1124	5.95	0.85
SEP 11,83	SEP 10,83	228.0	19.0	4.35	4.69	0.0462	2.15	0.30
SEP 17,83	SEP 16,83	1187.0	27.2	3.91	4.11	0.0654	2.70	0.38
SEP 19,83	SEP 18,83	797.0	23.8	4.03	4.49	0.0588	3.30	0.40
SEP 21,83	SEP 20,83	2320.0	15.9	4.11	4.64	0.0420	1.70	0.14

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NITHGROVE/DAILY/AEROCHEM #07 PAGE : 6

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
APR 22,83	APR 21,83	******	******	******	******	******	******	******
APR 29,83	APR 28,83	0.35	0.10	0.050	0.060	0.060	0.410	0.0417
MAY 2,83	MAY 1,83	0.08	0.04	0.015	0.035	0.035	0.126	0.0148
MAY 3,83	MAY 2,83	0.31	0.09	0.045	0.070	0.060	0.294	0.0209
MAY 4,83	MAY 3,83	******	D 0.39	******	******	******	******	******
MAY 7,83	MAY 6,83	0.56	0.23	0.075	0.050	0.040	0.440	0.0813
MAY 8,83	MAY 7,83	0.46	0.12	0.075	0.045	0.065	0.450	0.0282
MAY 15,83	MAY 14,83	0.22	0.15	0.030	0.045	0.050	0.420	0.0468
MAY 20,83	MAY 19,83	0.18	0.06	0.025	0.030	0.035	0.100	0.0174
MAY 23,83	MAY 22,83	0.15	0.13	0.025	D 0.045	0.065	0.280	0.0389
MAY 24,83	MAY 23,83	0.24	0.20	0.060	0.045	0.100	0.104	******
MAY 26,83	MAY 25,83	D 0.17	0.10	0.035	0.050	0.020	0.460	D 0.0407
MAY 27,83	MAY 26,83	******	0.19	******	******	******	******	0.0085
MAY 30,83	MAY 29,83	0.16	0.10	0.025	0.075	0.050	0.222	0.0603
JUN 1,83	MAY 30,83	0.24	0.09	0.030	0.030	0.015	0.344	0.0347
JUN 8,83	JUN 7,83	******	0.52	******	******	******	******	G 0.0015
JUN 10,83	JUN 9,83	1.16	0.21	G 0.245	0.075	0.045	0.680	0.0389
JUN 16,83	JUN 15,83	0.89	0.47	0.085	0.090	0.080	1.030	0.2754
JUN 26,83	JUN 25,83	0.59	0.26	0.135	0.095	0.090	1.000	0.0759
JUN 27,83	JUN 26,83	0.34	0.22	0.060	0.105	0.085	0.630	0.0871
JUL 5,83	JUL 4,83	0.24	0.08	0.035	0.030	0.050	0.350	0.0178
JUL 9,83	JUL 8,83	0.12	0.07	0.020	0.065	0.045	0.210	0.0069
JUL 21,83	JUL 20,83	******	0.26	******	******	******	<W 0.002	G 0.0005
JUL 29,83	JUL 28,83	******	******	******	******	******	******	******
JUL 30,83	JUL 29,83	******	0.42	******	******	******	0.450	0.0339
AUG 1,83	JUL 31,83	0.07	0.08	0.010	0.055	0.025	0.200	0.0219
AUG 4,83	AUG 3,83	D 0.25	0.27	0.060	G 0.175	0.120	0.540	0.0550
AUG 7,83	AUG 6,83	0.11	0.07	0.025	0.065	0.040	0.160	0.0186
AUG 9,83	AUG 8,83	0.27	0.12	0.060	0.125	0.090	0.148	0.0214
AUG 17,83	AUG 16,83	U 1.39	0.52	G 0.280	U 0.165	0.100	1.460	U 0.1905
AUG 20,83	AUG 19,83	******	0.52	******	******	******	0.880	0.0214
AUG 22,83	AUG 21,83	0.16	0.08	0.030	0.035	0.025	0.188	0.0257
AUG 31,83	AUG 30,83	0.31	0.26	0.060	G 0.195	0.105	0.236	D 0.0100
SEP 7,83	SEP 6,83	0.65	0.26	0.110	0.125	0.060	0.990	0.1380
SEP 8,83	SEP 7,83	******	0.13	******	******	******	0.088	G 0.0022
SEP 10,83	SEP 9,83	1.10	0.34	0.165	0.065	0.200	0.390	0.0741
SEP 11,83	SEP 10,83	0.35	0.15	0.070	0.095	0.130	0.308	0.0204
SEP 17,83	SEP 16,83	0.12	0.11	0.020	0.025	0.035	0.192	0.0776
SEP 19,83	SEP 18,83	0.23	0.06	0.020	0.085	0.025	0.610	0.0324
SEP 21,83	SEP 20,83	0.10	0.04	0.010	0.015	0.015	0.162	0.0229

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NITHGROVE/DAILY/AEROCHEM #07 PAGE : 7

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
SEP 22,83	SEP 21,83	715	700	715	930	1	7.4	1	28295	2	1	92	C	JC
SEP 23,83	SEP 22,83	700	730	700	950	1	17.0	1	28296	2	1	99	BC	JM
SEP 24,83	SEP 23,83	730	700	1530	1630	1	3.8	1	28297	2	1	61		
SEP 26,83	SEP 25,83	730	730	1630	1800	1	6.8	1	28298	2	1	84		
OCT 4,83	OCT 3,83	730	730	1900	2300	1	17.6	1	28299	2	1	****	EF	
OCT 5,83	OCT 4,83	730	730	830	1030	1	5.0	1	28300	2	1	90		
OCT 6,83	OCT 5,83	730	730	830	930	1	5.8	1	56800	2	1	69		
OCT 7,83	OCT 6,83	730	730	700	900	1	6.8	1	56801	2	1	30		NH
OCT 8,83	OCT 7,83	730	800	2200	100	1	25.8	1	56802	2	1	98		
OCT 9,83	OCT 8,83	800	800	2300	100	1	1.8	1	56803	2	1	69		
OCT 13,83	OCT 12,83	730	730	850	1200	1	5.0	1	56804	2	1	100		
OCT 14,83	OCT 13,83	730	1000	1630	1900	1	20.4	1	56805	2	1	102		J
OCT 15,83	OCT 14,83	1000	800	1400	1630	1	14.4	1	56806	2	1	95		
OCT 23,83	OCT 22,83	730	900	330	900	1	****	1	56807	2	1	****		J
OCT 24,83	OCT 23,83	900	730	900	1230	1	3.8	1	56808	2	1	78		J
OCT 26,83	OCT 25,83	715	715	1400	1600	1	2.0	1	56809	2	1	69		
OCT 27,83	OCT 26,83	715	730	1000	1400	1	2.6	1	56810	2	1	70		C
OCT 29,83	OCT 28,83	730	800	1900	2100	1	2.4	1	56811	2	1	70		
NOV 2,83	NOV 1,83	730	730	530	630	1	1.4	1	56812	2	1	59		
NOV 3,83	NOV 2,83	730	730	930	1430	3	13.2	1	56813	2	1	91		
NOV 4,83	NOV 3,83	730	730	730	1300	2	6.0	2	56814	2	1	14		N
NOV 11,83	NOV 10,83	730	900	700	1400	3	11.7	2	56815	2	1	86		
NOV 12,83	NOV 11,83	900	730	900	1200	2	5.9	2	56816	2	1	U 7	FI	N
NOV 16,83	NOV 15,83	730	730	1500	2200	2	10.1	2	56817	2	1	57		
NOV 17,83	NOV 16,83	730	730	730	1100	2	3.9	2	56818	2	1	63		
NOV 21,83	NOV 20,83	730	800	1300	1800	1	17.3	2	56819	2	1	84		
NOV 22,83	NOV 21,83	800	730	900	1100	1	2.1	2	56820	2	1	140		N
NOV 24,83	NOV 23,83	800	830	1600	1800	1	5.5	2	56821	2	1	98		
NOV 29,83	NOV 28,83	700	600	1500	1630	1	10.5	2	56822	2	1	92		
NOV 30,83	NOV 29,83	600	600	1600	1900	2	4.7	2	56823	2	1	40		N
DEC 1,83	NOV 30,83	600	600	900	1100	2	9.9	2	56824	2	1	43		NJHCM
DEC 2,83	DEC 1,83	600	600	1400	1600	2	0.5	2	56825	2	1	****	EK	
DEC 3,83	DEC 2,83	600	730	2000	2200	2	5.1	2	56826	2	1	51		
DEC 7,83	DEC 6,83	730	830	1600	1900	2	23.1	2	56827	2	1	23		N
DEC 9,83	DEC 8,83	845	730	1300	1500	2	5.9	2	56829	2	1	62		
DEC 11,83	DEC 10,83	630	730	630	930	1	2.3	2	56831	2	1	33		N
DEC 12,83	DEC 11,83	730	630	400	600	3	10.9	2	56832	2	1	47		N
DEC 13,83	DEC 12,83	630	630	630	1100	3	11.7	2	56833	2	1	76		J
DEC 15,83	DEC 14,83	630	630	630	930	1	2.4	2	56834	2	1	89		
DEC 17,83	DEC 16,83	630	800	1500	1630	2	3.3	2	56836	2	1	19		N

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NITHGROVE/DAILY/AEROCHEM #07

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD		PH LAB		TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L		NITRATE AS N MG/L
SEP 22,83	SEP 21,83	437.0	4.3	4.64		G 5.90		0.0154	0.60	<W	0.01
SEP 23,83	SEP 22,83	1082.0	7.4	U 5.03		U 7.20		0.0170	0.55	<W	0.01
SEP 24,83	SEP 23,83	149.0	9.6	******		4.85		0.0340	1.00		0.05
SEP 26,83	SEP 25,83	369.0	25.5	4.22		4.36		0.0686	1.90		0.41
OCT 4,83	OCT 3,83	******	******	******		******		******	******		******
OCT 5,83	OCT 4,83	290.0	60.1	3.74		3.98		0.1188	6.05		0.84
OCT 6,83	OCT 5,83	259.0	8.9	4.52		4.90		0.0362	1.05		0.08
OCT 7,83	OCT 6,83	133.0	7.5	******		D 5.03		0.0332	0.60		0.16
OCT 8,83	OCT 7,83	1630.0	17.3	4.29		4.50		0.0604	1.20		0.40
OCT 9,83	OCT 8,83	80.0	24.2	******		4.40		0.0684	1.85		0.72
OCT 13,83	OCT 12,83	321.0	15.5	4.26		4.52		0.0482	1.30		0.27
OCT 14,83	OCT 13,83	1340.0	9.5	4.19		4.68		0.0352	0.75		0.15
OCT 15,83	OCT 14,83	879.0	10.3	4.55		4.78		0.0328	1.20		0.21
OCT 23,83	OCT 22,83	529.0	14.5	D 3.98		4.63		0.0436	1.05		0.24
OCT 24,83	OCT 23,83	191.0	14.3	4.03		4.61		0.0436	1.25		0.18
OCT 26,83	OCT 25,83	89.0	******	******		4.20		0.0932	2.65		0.76
OCT 27,83	OCT 26,83	118.0	5.0	******		G 5.79		0.0200	0.50		0.04
OCT 29,83	OCT 28,83	109.0	******	******		5.21		0.0332	******		******
NOV 2,83	NOV 1,83	53.0	******	******		4.14		0.1278	4.55		1.20
NOV 3,83	NOV 2,83	776.0	39.9	3.94		4.20		0.1012	4.15		0.72
NOV 4,83	NOV 3,83	54.0	******	******		U 7.64		0.0158	0.45		0.09
NOV 11,83	NOV 10,83	648.0	42.9	3.74		4.05		0.1122	3.55		0.75
NOV 12,83	NOV 11,83	29.0	******	******		U 6.27		0.0176	2.15		0.16
NOV 16,83	NOV 15,83	373.0	15.1	4.34		4.63		D 0.0880	0.80		0.47
NOV 17,83	NOV 16,83	158.0	8.7	******		5.03		0.0270	0.55		0.19
NOV 21,83	NOV 20,83	936.0	27.0	3.97		4.28		0.0712	2.15		0.50
NOV 22,83	NOV 21,83	189.0	23.8	4.23		4.52		0.0326	3.30		0.40
NOV 24,83	NOV 23,83	348.0	55.0	3.72		3.93		0.1732	4.05		1.23
NOV 29,83	NOV 28,83	623.0	22.5	3.98		4.33		0.0824	1.60		0.46
NOV 30,83	NOV 29,83	123.0	23.9	******		4.38		0.0634	1.60		0.62
DEC 1,83	NOV 30,83	278.0	4.6	U 4.80		G 5.79		0.0198	0.45		0.08
DEC 2,83	DEC 1,83	******	******	******		******		******	******		******
DEC 3,83	DEC 2,83	170.0	20.4	4.18		4.56		0.0542	1.50		0.73
DEC 7,83	DEC 6,83	352.0	6.5	4.63		G 5.15		0.0294	0.35		0.20
DEC 9,83	DEC 8,83	237.0	24.1	4.16		4.40		0.0596	0.95		0.82
DEC 11,83	DEC 10,83	50.0	******	******		G 5.98		0.0240	2.00		0.83
DEC 12,83	DEC 11,83	331.0	14.2	4.30		4.69		0.0380	1.15		0.27
DEC 13,83	DEC 12,83	575.0	14.6	4.07		4.62		0.0412	1.35		0.16
DEC 15,83	DEC 14,83	138.0	41.0	******		4.07		0.1112	3.30		0.88
DEC 17,83	DEC 16,83	42.0	******	******		G 6.13		0.0212	0.90		1.13

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NITHGROVE/DAILY/AEROCHEM #07 PAGE : 9

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
SEP 22,83	SEP 21,83	0.25	0.07	0.020	0.060	0.055	0.046	G 0.0013
SEP 23,83	SEP 22,83	0.11	0.16	0.030	U 0.315	0.110	0.540	U 0.0001
SEP 24,83	SEP 23,83	0.18	0.08	0.030	0.045	0.045	0.006	0.0141
SEP 26,83	SEP 25,83	0.25	0.09	0.035	0.035	0.015	0.136	0.0437
OCT 4,83	OCT 3,83	******	******	******	******	******	******	******
OCT 5,83	OCT 4,83	0.39	0.18	0.040	0.075	0.055	******	0.1047
OCT 6,83	OCT 5,83	0.13	0.06	D 0.015	0.030	0.020	0.172	0.0126
OCT 7,83	OCT 6,83	0.21	0.14	0.045	0.060	0.050	0.098	D 0.0093
OCT 8,83	OCT 7,83	0.17	0.07	0.030	0.020	0.020	0.124	0.0316
OCT 9,83	OCT 8,83	0.30	0.23	0.060	0.060	0.110	0.310	0.0398
OCT 13,83	OCT 12,83	0.11	0.26	0.030	0.050	0.035	0.098	0.0302
OCT 14,83	OCT 13,83	0.05	0.04	0.010	<T 0.010	<W 0.005	0.058	0.0209
OCT 15,83	OCT 14,83	0.12	0.06	0.020	0.030	<W 0.005	0.260	0.0166
OCT 23,83	OCT 22,83	0.09	0.12	0.025	D 0.025	0.070	0.022	0.0234
OCT 24,83	OCT 23,83	0.11	<T 0.01	0.025	0.025	0.040	0.032	0.0245
OCT 26,83	OCT 25,83	0.25	0.23	0.065	0.060	0.100	0.194	0.0631
OCT 27,83	OCT 26,83	0.13	<T 0.02	0.025	0.105	0.085	0.054	G 0.0016
OCT 29,83	OCT 28,83	******	******	******	******	******	******	0.0062
NOV 2,83	NOV 1,83	******	0.35	******	******	******	******	0.0724
NOV 3,83	NOV 2,83	0.10	0.11	0.015	0.040	0.045	0.660	0.0631
NOV 4,83	NOV 3,83	******	0.50	******	******	******	0.320	U 0.0000
NOV 11,83	NOV 10,83	0.08	0.17	0.010	0.025	0.030	0.328	0.0891
NOV 12,83	NOV 11,83	******	U 0.53	******	******	******	******	U 0.0005
NOV 16,83	NOV 15,83	0.08	0.08	0.010	0.020	0.045	0.170	0.0234
NOV 17,83	NOV 16,83	0.14	0.11	0.025	0.025	0.035	D 0.044	0.0093
NOV 21,83	NOV 20,83	0.15	0.23	0.020	0.030	0.100	0.176	0.0525
NOV 22,83	NOV 21,83	0.20	0.13	0.040	0.035	0.030	0.650	0.0302
NOV 24,83	NOV 23,83	0.35	0.35	0.040	0.050	0.150	0.370	0.1175
NOV 29,83	NOV 28,83	0.09	0.05	0.010	0.030	0.030	0.098	0.0468
NOV 30,83	NOV 29,83	0.20	0.20	0.040	0.050	0.070	0.132	0.0417
DEC 1,83	NOV 30,83	0.08	0.06	0.015	0.020	0.030	0.086	G 0.0016
DEC 2,83	DEC 1,83	******	******	******	******	******	******	******
DEC 3,83	DEC 2,83	0.14	0.10	0.030	0.050	0.045	0.510	0.0275
DEC 7,83	DEC 6,83	0.05	0.03	0.010	<T 0.010	0.020	D 0.136	G 0.0071
DEC 9,83	DEC 8,83	0.13	0.18	0.020	0.040	0.075	0.380	0.0398
DEC 11,83	DEC 10,83	******	0.40	******	******	******	******	G 0.0010
DEC 12,83	DEC 11,83	0.12	0.18	0.020	0.055	0.125	0.150	0.0204
DEC 13,83	DEC 12,83	0.10	0.08	0.015	0.040	0.045	0.052	0.0240
DEC 15,83	DEC 14,83	0.17	0.27	0.040	0.080	0.065	0.348	0.0851
DEC 17,83	DEC 16,83	******	0.47	******	******	******	******	G 0.0007

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NITHGROVE/DAILY/AEROCHEM #07 PAGE : 10

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES		SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
DEC 19,83	DEC 18,83	900	1200	900	****	2	5.0	3	56837	2	1		****	EK	
DEC 22,83	DEC 21,83	800	800	2300	300	3	19.4	2	56838	2	1		36	B	NHM
DEC 23,83	DEC 22,83	800	900	900	1100	2	9.0	2	56839	2	1		48	C	N
DEC 24,83	DEC 23,83	900	830	1600	1930	2	6.8	2	56840	2	1		37	CD	N
DEC 26,83	DEC 25,83	900	900	700	900	2	0.6	2	56841	2	1		****	EK	
DEC 27,83	DEC 26,83	900	830	****	****	2	0.5	2	56842	2	1		****	EK	
DEC 28,83	DEC 27,83	830	830	930	1230	2	2.4	2	56843	2	1		12	C	N
DEC 30,83	DEC 29,83	830	830	830	1100	2	9.4	2	56844	2	1	U	39	GC	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NITHGROVE/DAILY/AEROCHEM #07

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
DEC 19,83	DEC 18,83	******	******	******	******	******	******	******
DEC 22,83	DEC 21,83	457.0	6.0	U 4.81	U 5.10	0.0268	0.25	0.23
DEC 23,83	DEC 22,83	277.0	22.5	4.23	4.44	0.0592	2.25	0.53
DEC 24,83	DEC 23,83	164.0	4.7	******	U 6.69	0.0196	0.25	0.17
DEC 26,83	DEC 25,83	******	******	******	******	******	******	******
DEC 27,83	DEC 26,83	******	******	******	******	******	******	******
DEC 28,83	DEC 27,83	19.0	******	******	4.27	D 0.0708	******	******
DEC 30,83	DEC 29,83	235.0	******	******	U 6.19	0.0190	******	******

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NITHGROVE/DAILY/AEROCHEM #07 PAGE : 12

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
DEC 19,83	DEC 18,83	******	******	******	******	******	******	******
DEC 22,83	DEC 21,83	0.06	0.07	0.015	0.025	0.025	0.060	U 0.0079
DEC 23,83	DEC 22,83	0.13	0.19	0.035	0.025	0.130	D 0.430	0.0363
DEC 24,83	DEC 23,83	0.03	0.07	0.010	0.030	0.025	0.520	U 0.0002
DEC 26,83	DEC 25,83	******	******	******	******	******	******	******
DEC 27,83	DEC 26,83	******	******	******	******	******	******	******
DEC 28,83	DEC 27,83	******	******	******	******	******	******	0.0537
DEC 30,83	DEC 29,83	******	******	******	******	******	******	U 0.0006

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAVEN LAKE/DAILY/AEROCHEM #05 PAGE : 1

REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR.	SAMPLING START/END HR.	PRECIP START/END HR.	PRECIP START/END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES		SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
JAN 4,83	JAN 3,83	830	830	830	1230	2	1.9	2	28838	2	1		50		
JAN 6,83	JAN 5,83	830	830	****	****	2	1.7	2	28839	2	1		80		
JAN 7,83	JAN 6,83	830	830	400	830	3	9.3	2	28840	2	1		75		
JAN 8,83	JAN 7,83	830	830	1600	1800	2	1.4	2	28841	2	1		65		T
JAN 11,83	JAN 10,83	830	830	1300	1800	1	15.3	2	28842	2	1		97		HM
JAN 12,83	JAN 11,83	830	830	2000	2400	3	2.7	2	28843	2	1		76		
JAN 14,83	JAN 13,83	830	830	2000	2400	2	1.1	2	28844	2	1		****	EK	
JAN 15,83	JAN 14,83	830	830	100	830	2	5.5	2	28845	2	1		31		N
JAN 16,83	JAN 15,83	830	830	830	1100	2	1.3	2	28846	2	1		14		N
JAN 23,83	JAN 22,83	830	830	400	600	2	2.7	2	28847	2	1		59		
JAN 24,83	JAN 23,83	830	830	1900	2400	2	6.9	2	28848	2	1		80		
JAN 25,83	JAN 24,83	830	830	2030	2300	2	3.9	2	28849	2	1		46		N
JAN 26,83	JAN 25,83	830	830	900	1115	2	2.5	2	28850	2	1		10		N
JAN 31,83	JAN 30,83	830	830	1230	1830	2	9.9	2	28851	2	1		83		
FEB 1,83	JAN 31,83	830	830	830	1100	4	1.3	2	28852	2	1		57		
FEB 3,83	FEB 2,83	830	830	830	1430	1	19.3	2	28853	2	1		104		
FEB 4,83	FEB 3,83	830	830	830	1330	4	6.7	2	28854	2	1		97		
FEB 7,83	FEB 6,83	830	830	400	830	2	3.5	2	28855	2	1		60		
FEB 8,83	FEB 7,83	830	830	830	1000	2	1.5	2	28856	2	1		50		
FEB 18,83	FEB 17,83	830	830	900	1100	4	1.1	2	28857	2	1		87		
FEB 23,83	FEB 22,83	830	830	2100	200	3	8.7	2	28858	2	1		97		
MAR 4,83	MAR 3,83	830	****	2100	2400	3	3.7	2	28859	2	1		97		
MAR 5,83	MAR 4,83	830	****	1430	1800	1	5.1	2	28860	2	1		114		
MAR 7,83	MAR 6,83	830	****	1900	2000	1	0.9	2	28861	2	1		117		
MAR 9,83	MAR 8,83	830	****	2200	2400	1	1.3	2	28862	2	1		79		
MAR 10,83	MAR 9,83	830	****	1900	2200	1	3.6	2	28863	2	1		97		
MAR 15,83	MAR 14,83	830	830	1900	2000	1	0.2	2	28864	2	1	U	273	P	N
MAR 19,83	MAR 18,83	830	830	2100	2400	1	6.7	2	28865	2	1		90		
MAR 20,83	MAR 19,83	830	830	1400	1800	2	7.1	2	28866	2	1		106		CM
MAR 22,83	MAR 21,83	830	830	900	1400	3	14.1	2	28867	2	1		34		N
MAR 23,83	MAR 22,83	830	830	900	1500	2	0.5	2	28868	2	1		****	E	N
MAR 28,83	MAR 27,83	830	830	1130	1900	3	10.3	2	28869	2	1		****	GE	
MAR 29,83	MAR 28,83	830	830	830	1400	4	2.1	2	28870	2	1		130		N
APR 3,83	APR 2,83	830	830	2100	800	2	14.7	2	28871	2	1		79		HCM
APR 4,83	APR 3,83	830	830	1730	400	1	6.1	2	28872	2	1		97		
APR 5,83	APR 4,83	830	830	1600	1730	1	0.3	2	28873	2	1		31	E	N
APR 7,83	APR 6,83	830	830	645	800	1	0.4	2	28874	2	1	U	210	P	N
APR 8,83	APR 7,83	830	830	830	1200	1	5.5	2	28875	2	1		108		
APR 10,83	APR 9,83	830	830	200	830	1	18.7	2	28876	2	1		100		
APR 11,83	APR 10,83	830	830	830	1100	1	1.3	2	28877	2	1		130		N

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAVEN LAKE/DAILY/AEROCHEM #05

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
JAN 4,83	JAN 3,83	62.0	******	******	4.97	0.0340	0.05	0.08
JAN 6,83	JAN 5,83	88.0	******	******	4.09	0.0872	1.55	0.99
JAN 7,83	JAN 6,83	448.0	43.0	3.98	4.14	0.1134	D 2.85	0.97
JAN 8,83	JAN 7,83	59.0	******	******	4.09	0.0770	1.25	0.70
JAN 11,83	JAN 10,83	959.0	27.5	4.14	4.44	0.0682	1.90	0.50
JAN 12,83	JAN 11,83	133.0	******	******	4.28	0.0924	1.30	0.66
JAN 14,83	JAN 13,83	******	******	******	******	******	******	******
JAN 15,83	JAN 14,83	111.0	******	******	4.06	0.1224	1.15	1.32
JAN 16,83	JAN 15,83	12.0	******	******	******	******	******	******
JAN 23,83	JAN 22,83	103.0	******	******	4.43	0.0624	1.30	0.37
JAN 24,83	JAN 23,83	354.0	38.4	4.08	4.06	0.1134	2.10	0.85
JAN 25,83	JAN 24,83	116.0	******	******	4.19	0.0916	2.35	0.60
JAN 26,83	JAN 25,83	17.0	******	******	******	******	******	******
JAN 31,83	JAN 30,83	527.0	48.0	3.99	3.99	0.1394	3.20	1.00
FEB 1,83	JAN 31,83	48.0	******	******	4.08	0.1062	3.10	0.60
FEB 3,83	FEB 2,83	1290.0	30.6	4.18	4.15	0.0972	1.95	0.51
FEB 4,83	FEB 3,83	418.0	38.0	4.12	4.02	0.1148	2.60	0.64
FEB 7,83	FEB 6,83	135.0	28.0	******	4.11	0.0918	0.15	0.90
FEB 8,83	FEB 7,83	49.0	******	******	4.48	0.0602	0.20	0.32
FEB 18,83	FEB 17,83	62.0	******	******	3.31	G 0.5720	G 11.30	G 5.00
FEB 23,83	FEB 22,83	544.0	52.0	4.01	3.97	0.1472	3.95	0.84
MAR 4,83	MAR 3,83	231.0	41.5	4.06	4.24	0.0626	3.40	1.00
MAR 5,83	MAR 4,83	373.0	23.4	4.23	4.38	0.0572	1.80	0.31
MAR 7,83	MAR 6,83	68.0	******	******	4.51	0.0572	4.15	0.56
MAR 9,83	MAR 8,83	66.0	******	******	3.92	0.1526	4.50	1.28
MAR 10,83	MAR 9,83	226.0	G 92.5	3.66	3.73	G 0.2340	6.75	1.31
MAR 15,83	MAR 14,83	35.0	******	******	******	******	G 23.50	G 5.90
MAR 19,83	MAR 18,83	390.0	8.9	4.69	4.99	0.0318	0.65	0.18
MAR 20,83	MAR 19,83	485.0	6.6	4.67	5.08	0.0274	0.40	0.10
MAR 22,83	MAR 21,83	315.0	6.1	4.80	5.04	0.0290	0.55	0.05
MAR 23,83	MAR 22,83	******	******	******	******	******	******	******
MAR 28,83	MAR 27,83	******	******	******	******	******	******	******
MAR 29,83	MAR 28,83	176.0	44.0	3.99	******	******	2.65	0.79
APR 3,83	APR 2,83	748.0	12.8	4.47	4.93	0.0304	0.95	0.27
APR 4,83	APR 3,83	381.0	27.7	4.21	4.33	0.0676	1.85	0.52
APR 5,83	APR 4,83	6.0	******	******	******	******	******	******
APR 7,83	APR 6,83	54.0	******	******	******	******	5.25	0.68
APR 8,83	APR 7,83	382.0	50.0	3.93	4.01	0.1272	4.45	0.59
APR 10,83	APR 9,83	1208.0	20.4	4.28	4.47	0.0568	1.50	0.30
APR 11,83	APR 10,83	109.0	******	******	3.84	0.1876	5.95	1.17

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAVEN LAKE/DAILY/AEROCHEM #05 PAGE : 3

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
JAN 4,83	JAN 3,83	******	0.15	******	******	******	******	0.0107
JAN 6,83	JAN 5,83	G 0.88	0.29	0.090	0.025	0.050	0.092	0.0813
JAN 7,83	JAN 6,83	0.09	0.20	0.005	0.025	0.030	D 0.600	0.0724
JAN 8,83	JAN 7,83	******	0.13	******	******	******	******	0.0813
JAN 11,83	JAN 10,83	0.10	0.12	0.005	<T 0.005	0.020	0.208	0.0363
JAN 12,83	JAN 11,83	0.06	0.10	0.005	<T 0.005	0.020	0.178	0.0525
JAN 14,83	JAN 13,83	******	******	******	******	******	******	******
JAN 15,83	JAN 14,83	0.04	0.28	0.040	0.025	0.055	0.074	0.0871
JAN 16,83	JAN 15,83	******	******	******	******	******	******	******
JAN 23,83	JAN 22,83	0.04	0.15	0.045	0.025	0.085	0.032	0.0372
JAN 24,83	JAN 23,83	<T 0.01	0.16	0.010	0.025	0.040	0.162	0.0871
JAN 25,83	JAN 24,83	<T 0.02	0.11	0.010	0.040	******	0.260	0.0646
JAN 26,83	JAN 25,83	******	******	******	******	******	******	******
JAN 31,83	JAN 30,83	0.09	0.37	<W 0.005	0.120	D 0.145	0.410	0.1023
FEB 1,83	JAN 31,83	******	0.14	******	******	******	******	0.0832
FEB 3,83	FEB 2,83	0.04	0.27	<W 0.005	0.140	0.140	0.148	0.0708
FEB 4,83	FEB 3,83	0.02	0.07	<W 0.005	0.010	0.020	0.324	0.0955
FEB 7,83	FEB 6,83	******	0.12	******	******	******	<T 0.004	0.0776
FEB 8,83	FEB 7,83	******	0.07	******	******	******	******	0.0331
FEB 18,83	FEB 17,83	******	G 1.00	******	******	******	******	0.4898
FEB 23,83	FEB 22,83	0.13	0.18	0.015	0.025	0.045	0.590	0.1072
MAR 4,83	MAR 3,83	0.23	0.17	0.035	0.040	0.075	0.780	0.0575
MAR 5,83	MAR 4,83	0.11	0.07	0.015	0.010	0.035	0.052	0.0417
MAR 7,83	MAR 6,83	G 1.15	0.52	G 0.125	G 0.165	G 0.375	******	0.0309
MAR 9,83	MAR 8,83	D 0.27	0.27	0.025	0.050	0.170	******	0.1202
MAR 10,83	MAR 9,83	0.07	0.15	0.010	0.025	0.050	0.314	0.1862
MAR 15,83	MAR 14,83	******	G 1.51	******	******	******	******	******
MAR 19,83	MAR 18,83	0.07	0.11	0.010	0.045	0.125	0.106	0.0102
MAR 20,83	MAR 19,83	0.02	0.03	<W 0.005	<W 0.005	0.015	0.044	0.0083
MAR 22,83	MAR 21,83	0.10	0.03	<T 0.005	0.015	0.025	<T 0.002	0.0091
MAR 23,83	MAR 22,83	******	******	******	******	******	******	******
MAR 28,83	MAR 27,83	******	******	******	******	******	******	******
MAR 29,83	MAR 28,83	0.15	0.09	0.020	0.020	0.025	0.132	******
APR 3,83	APR 2,83	0.10	0.06	0.010	0.020	0.030	D 0.172	0.0117
APR 4,83	APR 3,83	0.08	0.09	0.010	0.030	0.020	0.240	0.0468
APR 5,83	APR 4,83	******	******	******	******	******	******	******
APR 7,83	APR 6,83	******	0.25	******	******	******	******	******
APR 8,83	APR 7,83	0.06	0.08	<W 0.005	0.020	0.020	0.314	0.0977
APR 10,83	APR 9,83	0.06	0.03	<W 0.005	0.030	0.010	0.112	0.0339
APR 11,83	APR 10,83	0.26	0.20	0.020	0.070	0.110	0.600	0.1445

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAVEN LAKE/DAILY/AEROCHEM #05 PAGE : 4

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
APR 14,83	APR 13,83	830	830	530	830	1	3.3	2	28878	2	1	105		
APR 15,83	APR 14,83	830	830	2000	2200	1	10.7	2	28879	2	1	108		
APR 16,83	APR 15,83	830	830	730	800	3	****	2	28880	2	1	****	E	
APR 20,83	APR 19,83	830	830	400	600	2	1.8	2	28881	2	1	11		N
APR 21,83	APR 20,83	830	830	2000	2400	3	4.6	2	28882	2	1	57		
APR 29,83	APR 28,83	830	830	1800	1930	1	4.0	2	28883	2	1	120		NH
MAY 1,83	APR 30,83	830	830	1245	1900	1	20.4	2	28884	2	1	97		N
MAY 2,83	MAY 1,83	830	830	200	600	1	10.0	1	28885	2	1	95		
MAY 3,83	MAY 2,83	830	830	1515	1645	1	27.4	1	28886	2	1	105		
MAY 4,83	MAY 3,83	830	830	1630	2100	1	8.6	1	28887	2	1	96		
MAY 7,83	MAY 6,83	830	830	400	500	1	2.5	1	28888	2	1	93	C	
MAY 8,83	MAY 7,83	830	830	1830	830	1	29.0	1	28889	2	1	101		
MAY 9,83	MAY 8,83	830	830	830	1000	1	0.4	1	28890	2	1	42		N
MAY 15,83	MAY 14,83	830	830	2015	2400	1	14.4	1	28891	2	1	104		
MAY 20,83	MAY 19,83	830	830	1530	2300	1	20.0	1	28892	2	1	101		
MAY 21,83	MAY 20,83	830	830	1100	1230	1	2.2	1	28893	2	1	87		
MAY 23,83	MAY 22,83	830	830	1500	1930	1	12.5	1	28894	2	1	108		
MAY 24,83	MAY 23,83	830	830	1830	1900	1	0.6	1	28895	2	1	158		N
MAY 26,83	MAY 25,83	830	830	1900	2130	1	8.7	1	28896	2	1	104		
MAY 27,83	MAY 26,83	830	830	1000	1100	1	0.3	1	28897	2	1	52		
MAY 30,83	MAY 29,83	830	830	1900	2000	1	2.8	1	28898	2	1	118		
JUN 1,83	MAY 31,83	830	830	1530	1700	1	10.3	1	28899	2	1	101		
JUN 7,83	JUN 6,83	800	830	800	1300	1	6.4	1	28900	2	1	99		
JUN 10,83	JUN 9,83	830	830	200	400	1	4.0	1	28901	2	1	95		
JUN 26,83	JUN 25,83	830	830	700	730	1	0.4	1	28902	2	1	120		N
JUN 27,83	JUN 26,83	830	830	2145	2400	1	6.6	1	28903	2	1	107		
JUN 28,83	JUN 27,83	830	830	1830	2000	1	4.0	1	28904	2	1	99		
JUL 1,83	JUN 30,83	830	830	2045	2145	1	1.0	1	28905	2	1	54		
JUL 2,83	JUL 1,83	830	830	1400	1430	1	8.2	1	28906	2	1	103		
JUL 3,83	JUL 2,83	830	830	700	730	1	2.2	1	28907	2	1	99		
JUL 5,83	JUL 4,83	830	830	1845	2030	1	8.6	1	28908	2	1	108		
JUL 9,83	JUL 8,83	830	830	2130	2200	1	2.2	1	28909	2	1	92		
JUL 29,83	JUL 28,83	830	830	1630	1730	1	2.3	1	28910	2	1	103		
JUL 30,83	JUL 29,83	830	830	2045	2400	1	18.4	1	28911	2	1	107		
JUL 31,83	JUL 30,83	830	830	600	830	1	6.8	1	28912	2	1	118		
AUG 1,83	JUL 31,83	830	830	1030	1130	1	12.0	1	28913	2	1	107		
AUG 2,83	AUG 1,83	830	830	1545	1615	1	1.0	1	28914	2	1	45		N
AUG 4,83	AUG 3,83	830	830	400	600	1	14.4	1	28915	2	1	107		
AUG 9,83	AUG 8,83	830	830	1500	1515	1	0.7	1	28916	2	1	158		N
AUG 11,83	AUG 10,83	830	830	800	830	1	0.3	1	28593	2	1	93		

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAVEN LAKE/DAILY/AEROCHEM #05

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
APR 14,83	APR 13,83	223.0	86.2	3.73	3.84	0.2020	8.50	1.03
APR 15,83	APR 14,83	745.0	29.7	4.19	4.33	0.0708	2.60	0.38
APR 16,83	APR 15,83	5.0	******	******	******	******	******	******
APR 20,83	APR 19,83	13.0	******	******	******	******	******	******
APR 21,83	APR 20,83	171.0	******	G 5.06	G 5.42	0.0208	0.20	0.05
APR 29,83	APR 28,83	309.0	28.4	4.44	4.90	0.0386	4.00	0.61
MAY 1,83	APR 30,83	1277.0	******	******	******	******	******	******
MAY 2,83	MAY 1,83	615.0	25.5	4.26	4.43	0.0644	2.45	D 0.30
MAY 3,83	MAY 2,83	1850.0	15.6	4.52	4.73	0.0404	1.60	0.24
MAY 4,83	MAY 3,83	534.0	17.5	4.39	4.57	0.0502	1.60	0.14
MAY 7,83	MAY 6,83	150.0	******	******	U 4.00	U 0.1740	U 16.50	U 3.00
MAY 8,83	MAY 7,83	1885.0	15.6	4.52	4.85	B 0.2960	2.05	0.27
MAY 9,83	MAY 8,83	11.0	******	******	******	******	******	******
MAY 15,83	MAY 14,83	960.0	42.9	4.05	4.21	0.0934	4.60	0.49
MAY 20,83	MAY 19,83	1297.0	13.5	4.57	4.77	0.0386	1.20	0.17
MAY 21,83	MAY 20,83	124.0	******	******	4.21	0.1026	4.45	0.97
MAY 23,83	MAY 22,83	873.0	22.2	4.32	4.52	0.0568	2.25	0.21
MAY 24,83	MAY 23,83	61.0	******	******	******	******	1.10	0.10
MAY 26,83	MAY 25,83	584.0	39.6	4.11	4.23	0.0926	3.65	0.57
MAY 27,83	MAY 26,83	10.0	******	******	******	******	******	******
MAY 30,83	MAY 29,83	212.0	49.3	4.00	4.16	0.1148	5.45	0.61
JUN 1,83	MAY 31,83	667.0	24.2	4.42	4.62	0.0510	2.95	0.51
JUN 7,83	JUN 6,83	410.0	19.3	4.37	4.54	0.0560	1.95	0.15
JUN 10,83	JUN 9,83	244.0	G 120.0	3.74	3.82	0.2380	13.30	G 2.95
JUN 26,83	JUN 25,83	31.0	******	******	4.30	******	******	******
JUN 27,83	JUN 26,83	454.0	49.5	3.97	4.11	0.1122	6.10	0.78
JUN 28,83	JUN 27,83	255.0	18.5	4.27	4.57	0.0500	2.00	0.29
JUL 1,83	JUN 30,83	35.0	******	******	4.32	0.0912	4.95	0.96
JUL 2,83	JUL 1,83	544.0	38.0	4.10	4.24	0.0878	4.20	0.67
JUL 3,83	JUL 2,83	140.0	******	******	4.87	0.0364	0.75	0.24
JUL 5,83	JUL 4,83	597.0	17.8	4.39	4.66	0.0426	2.55	0.25
JUL 9,83	JUL 8,83	131.0	47.3	******	4.43	0.0850	7.00	1.03
JUL 29,83	JUL 28,83	152.0	80.0	******	3.92	0.1754	7.70	1.28
JUL 30,83	JUL 29,83	1273.0	22.7	4.33	4.56	0.0534	2.90	0.30
JUL 31,83	JUL 30,83	515.0	40.5	4.05	4.18	0.0994	4.15	0.42
AUG 1,83	JUL 31,83	825.0	34.2	******	4.26	0.0850	3.60	0.35
AUG 2,83	AUG 1,83	29.0	******	******	G 5.84	0.0206	******	******
AUG 4,83	AUG 3,83	995.0	41.3	4.03	4.18	0.0946	3.90	0.62
AUG 9,83	AUG 8,83	71.0	******	******	U 7.11	0.0208	2.95	0.49
AUG 11,83	AUG 10,83	18.0	******	******	4.39	0.0816	3.50	0.68

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAVEN LAKE/DAILY/AEROCHEM #05

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
APR 14,83	APR 13,83	0.35	0.28	0.050	0.100	0.150	0.870	0.1445
APR 15,83	APR 14,83	0.25	0.15	0.040	0.030	0.080	0.186	0.0468
APR 16,83	APR 15,83	******	******	******	******	******	******	******
APR 20,83	APR 19,83	******	******	******	******	******	******	******
APR 21,83	APR 20,83	0.05	0.04	0.010	0.020	0.020	0.016	G 0.0038
APR 29,83	APR 28,83	G 1.18	0.17	0.105	0.060	0.055	0.780	0.0126
MAY 1,83	APR 30,83	******	******	******	******	******	******	******
MAY 2,83	MAY 1,83	0.20	0.15	0.035	0.040	0.095	0.292	0.0372
MAY 3,83	MAY 2,83	0.29	0.15	0.050	0.030	0.060	0.208	0.0186
MAY 4,83	MAY 3,83	0.14	0.06	0.020	0.015	0.035	0.034	0.0269
MAY 7,83	MAY 6,83	U 6.30	U 0.92	U 0.715	U 0.285	U 0.275	U 1.630	U 0.1000
MAY 8,83	MAY 7,83	0.49	0.12	0.070	0.040	0.065	0.256	0.0141
MAY 9,83	MAY 8,83	******	******	******	******	******	******	******
MAY 15,83	MAY 14,83	0.36	0.25	0.055	0.050	0.100	0.570	0.0617
MAY 20,83	MAY 19,83	0.15	0.07	0.025	0.025	0.030	0.200	0.0170
MAY 21,83	MAY 20,83	0.26	0.19	0.040	0.050	0.060	1.150	0.0617
MAY 23,83	MAY 22,83	0.14	0.10	0.025	0.030	0.040	0.276	0.0302
MAY 24,83	MAY 23,83	0.25	0.20	0.050	0.025	0.090	D 0.358	******
MAY 26,83	MAY 25,83	0.30	0.12	0.045	0.025	0.025	0.540	0.0589
MAY 27,83	MAY 26,83	******	******	******	******	******	******	******
MAY 30,83	MAY 29,83	0.34	0.19	0.025	0.060	0.060	0.650	0.0692
JUN 1,83	MAY 31,83	0.50	0.15	0.060	0.050	0.045	0.530	0.0240
JUN 7,83	JUN 6,83	0.13	0.07	0.020	0.020	0.020	0.102	0.0288
JUN 10,83	JUN 9,83	G 2.85	G 0.73	G 0.670	0.125	0.105	1.460	0.1514
JUN 26,83	JUN 25,83	******	******	******	******	******	******	0.0501
JUN 27,83	JUN 26,83	0.64	0.20	0.130	0.085	0.040	0.860	0.0776
JUN 28,83	JUN 27,83	******	0.14	******	******	******	0.350	0.0269
JUL 1,83	JUN 30,83	******	0.60	******	******	******	******	0.0479
JUL 2,83	JUL 1,83	0.35	0.16	0.055	0.050	0.040	0.810	0.0575
JUL 3,83	JUL 2,83	******	0.10	******	******	******	******	0.0135
JUL 5,83	JUL 4,83	0.43	0.18	0.075	0.060	0.115	0.410	0.0219
JUL 9,83	JUL 8,83	G 2.00	0.39	G 0.280	G 0.150	0.140	0.790	0.0372
JUL 29,83	JUL 28,83	G 1.54	0.43	0.200	0.060	0.090	0.350	0.1202
JUL 30,83	JUL 29,83	0.32	0.13	0.040	0.030	0.060	0.390	0.0275
JUL 31,83	JUL 30,83	0.09	0.16	0.015	0.030	0.055	0.430	0.0661
AUG 1,83	JUL 31,83	0.07	0.13	0.010	0.025	0.035	0.360	0.0550
AUG 2,83	AUG 1,83	******	******	******	******	******	******	G 0.0014
AUG 4,83	AUG 3,83	0.36	0.13	0.080	0.040	0.025	0.440	0.0661
AUG 9,83	AUG 8,83	******	0.36	******	******	******	0.800	U 0.0001
AUG 11,83	AUG 10,83	******	0.55	******	******	******	******	0.0407

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAVEN LAKE/DAILY/AEROCHEM #05 PAGE : 7

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
AUG 20,83	AUG 19,83	830	830	1630	1700	1	0.9	1	28918	2	1	142		N
AUG 22,83	AUG 21,83	830	830	300	800	1	22.5	1	28919	2	1	111		
AUG 26,83	AUG 25,83	830	830	600	630	1	0.4	1	28920	2	1	70		
AUG 29,83	AUG 28,83	830	830	1500	1630	1	29.4	1	28921	2	1	97		JH
AUG 30,83	AUG 29,83	830	830	1520	1600	1	14.2	1	28922	2	1	105		
AUG 31,83	AUG 30,83	830	830	1400	1530	1	16.4	1	28923	2	1	106		JH
SEP 7,83	SEP 6,83	830	830	930	940	1	0.3	1	28924	2	1	10	E	N
SEP 10,83	SEP 9,83	830	830	2115	2130	1	0.4	1	28925	2	1	93		
SEP 11,83	SEP 10,83	830	830	200	230	1	0.9	1	28926	2	1	147		N
SEP 17,83	SEP 16,83	830	830	2300	2400	1	16.7	1	28927	2	1	104		
SEP 18,83	SEP 17,83	830	830	1015	1100	1	2.0	1	28928	2	1	76		
SEP 19,83	SEP 18,83	830	830	1000	1330	1	10.2	1	28929	2	1	98		
SEP 21,83	SEP 20,83	830	830	400	800	1	14.4	1	28930	2	1	99		
SEP 22,83	SEP 21,83	830	830	830	1030	1	2.0	1	28931	2	1	75		
SEP 23,83	SEP 22,83	830	830	1300	1330	1	1.0	1	28932	2	1	53		
SEP 24,83	SEP 23,83	830	830	1300	1330	1	1.3	1	28933	2	1	98		
SEP 26,83	SEP 25,83	830	830	1915	2300	1	4.4	1	28934	2	1	99		
SEP 28,83	SEP 27,83	830	830	830	840	1	0.3	1	28935	2	1	15	E	N
OCT 4,83	OCT 3,83	830	830	2000	2400	1	10.2	1	28936	2	1	99		J
OCT 5,83	OCT 4,83	830	830	2300	2400	1	18.2	1	28937	2	1	102		
OCT 6,83	OCT 5,83	830	830	1300	1615	1	8.2	1	28938	2	1	96		J
OCT 7,83	OCT 6,83	830	830	1200	1215	1	4.8	1	28939	2	1	98		JHM
OCT 8,83	OCT 7,83	830	830	600	830	1	8.4	1	28940	2	1	101		
OCT 9,83	OCT 8,83	830	830	830	1200	1	2.6	1	28941	2	1	156		N
OCT 12,83	OCT 11,83	830	830	745	830	1	0.7	1	28942	2	1	120		N
OCT 13,83	OCT 12,83	830	830	830	1130	1	8.0	1	28943	2	1	103		
OCT 14,83	OCT 13,83	830	830	1700	2200	1	22.4	1	28944	2	1	103		J
OCT 15,83	OCT 14,83	830	830	1515	1700	1	4.6	1	28945	2	1	92		JH
OCT 23,83	OCT 22,83	830	830	500	830	1	4.5	1	28946	2	1	97		
OCT 24,83	OCT 23,83	830	830	830	1230	1	2.7	1	28947	2	1	76		
OCT 26,83	OCT 25,83	830	830	2245	2330	1	2.0	1	28948	2	1	58		
OCT 27,83	OCT 26,83	830	830	1630	2000	1	2.3	1	28949	2	1	79		HCM
OCT 29,83	OCT 28,83	830	830	1730	1800	1	2.0	1	28950	2	1	72		HM
NOV 2,83	NOV 1,83	830	830	530	830	1	2.3	1	28951	2	1	75		HM
NOV 3,83	NOV 2,83	830	830	1745	2000	1	10.5	1	28952	2	1	101		
NOV 4,83	NOV 3,83	830	830	2200	2400	2	2.0	2	28953	2	1	10		N
NOV 5,83	NOV 4,83	830	830	1030	1800	2	7.4	2	28954	2	1	83		JC
NOV 11,83	NOV 10,83	830	830	1930	830	1	7.7	2	28955	2	1	98		
NOV 12,83	NOV 11,83	830	830	830	1200	3	9.7	2	28956	2	1	35		NJHCM
NOV 16,83	NOV 15,83	830	830	1400	1700	3	10.6	2	28957	2	1	95		

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAVEN LAKE/DAILY/AEROCHEM #05

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD		PH LAB		TOTAL H+ TO PH8.3 MG/L		SULPHATE MG/L		NITRATE AS N MG/L
AUG 20,83	AUG 19,83	82.0	******	******		U 6.21		0.0254		2.95		0.79
AUG 22,83	AUG 21,83	1603.0	16.4	******		4.68		0.0478		1.55		0.16
AUG 26,83	AUG 25,83	18.0	******	******		4.27		0.1120		******		******
AUG 29,83	AUG 28,83	1836.0	8.9	4.42		G 5.28		0.0280		1.40		0.06
AUG 30,83	AUG 29,83	956.0	30.2	4.04		4.38		0.0732		4.35		0.17
AUG 31,83	AUG 30,83	1115.0	6.1	4.62		G 5.87		0.0190		0.75		0.17
SEP 7,83	SEP 6,83	2.0	******	******		******		******		******		******
SEP 10,83	SEP 9,83	24.0	******	******		U 7.23		0.0190		5.20		1.23
SEP 11,83	SEP 10,83	85.0	20.5	******		G 5.64		0.0290		3.65		0.54
SEP 17,83	SEP 16,83	1118.0	39.7	4.03		4.16		0.1006		3.60		0.55
SEP 18,83	SEP 17,83	98.0	37.8	******		4.18		0.0946		3.70		0.50
SEP 19,83	SEP 18,83	646.0	23.5	4.31		4.42		0.0636		2.30		0.36
SEP 21,83	SEP 20,83	922.0	19.1	4.35		4.49		0.0544		1.85		0.21
SEP 22,83	SEP 21,83	97.0	5.1	******		5.18		0.0262		0.50		0.07
SEP 23,83	SEP 22,83	34.0	******	******		G 6.26		0.0178		0.70		0.06
SEP 24,83	SEP 23,83	82.0	13.6	******		4.64		0.0456		1.45		0.05
SEP 26,83	SEP 25,83	281.0	49.1	3.97		4.10		0.1268		4.30		0.76
SEP 28,83	SEP 27,83	3.0	******	******		******		******		******		******
OCT 4,83	OCT 3,83	652.0	20.2	4.02		4.79		0.0460		4.10		0.43
OCT 5,83	OCT 4,83	1190.0	49.3	3.80		4.13		0.1182		5.05		1.07
OCT 6,83	OCT 5,83	507.0	15.9	3.95		4.53		0.0548		1.20		0.25
OCT 7,83	OCT 6,83	303.0	4.3	4.68		G 5.44		0.0222		0.40		0.02
OCT 8,83	OCT 7,83	547.0	28.6	4.15		4.36		0.0756		2.90		0.68
OCT 9,83	OCT 8,83	260.0	24.2	4.17		4.38		0.0694		2.10		0.48
OCT 12,83	OCT 11,83	54.0	******	******		4.71		0.0410		1.70		0.36
OCT 13,83	OCT 12,83	531.0	6.0	4.63		5.12		0.0250		0.70		0.04
OCT 14,83	OCT 13,83	1489.0	9.5	4.20		4.78		0.0356		1.10		0.11
OCT 15,83	OCT 14,83	274.0	8.5	4.38		U 5.30		0.0256		1.40		0.23
OCT 23,83	OCT 22,83	280.0	19.2	4.07		4.44		0.0574		1.35		0.41
OCT 24,83	OCT 23,83	133.0	24.8	******		4.38		0.0696		2.05		0.35
OCT 26,83	OCT 25,83	75.0	******	******		4.19		0.0940		3.25		0.79
OCT 27,83	OCT 26,83	117.0	7.4	******		G 5.32		0.0244		0.85		0.04
OCT 29,83	OCT 28,83	93.0	20.5	******		U 7.36		0.0186		3.60		0.95
NOV 2,83	NOV 1,83	112.0	67.0	******		3.97		0.1826		6.60		1.54
NOV 3,83	NOV 2,83	680.0	72.5	3.63		3.96		0.1834		6.90		1.41
NOV 4,83	NOV 3,83	14.0	******	******		******		******		******		******
NOV 5,83	NOV 4,83	395.0	6.2	4.59		G 5.52		0.0222		0.30		0.05
NOV 11,83	NOV 10,83	487.0	47.0	3.77		4.14		0.1186		4.05		0.87
NOV 12,83	NOV 11,83	220.0	5.2	G 4.93		G 5.73		0.0194		0.45	<T	0.01
NOV 16,83	NOV 15,83	649.0	16.9	4.16		4.57		0.0506	D	1.05		0.36

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAVEN LAKE/DAILY/AEROCHEM #05

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
AUG 20,83	AUG 19,83	1.28	0.36	0.155	0.125	G 0.210	0.750	U 0.0006
AUG 22,83	AUG 21,83	0.13	0.06	0.015	0.015	0.025	0.142	0.0209
AUG 26,83	AUG 25,83	******	******	******	******	******	******	0.0537
AUG 29,83	AUG 28,83	0.29	0.04	0.020	0.090	0.100	0.234	G 0.0052
AUG 30,83	AUG 29,83	0.71	0.08	0.040	0.030	<T 0.010	0.270	0.0417
AUG 31,83	AUG 30,83	0.34	0.05	0.015	0.070	0.065	0.216	G 0.0013
SEP 7,83	SEP 6,83	******	******	******	******	******	******	******
SEP 10,83	SEP 9,83	******	U 0.89	******	******	******	******	U 0.0001
SEP 11,83	SEP 10,83	******	0.24	******	******	******	0.860	G 0.0023
SEP 17,83	SEP 16,83	0.17	D 0.25	0.020	0.015	0.020	0.312	0.0692
SEP 18,83	SEP 17,83	0.26	0.16	0.050	0.045	0.055	0.338	0.0661
SEP 19,83	SEP 18,83	0.29	0.11	0.035	0.035	0.020	0.236	0.0380
SEP 21,83	SEP 20,83	0.21	D 0.11	0.030	0.025	0.035	0.114	0.0324
SEP 22,83	SEP 21,83	0.18	0.05	0.030	0.015	0.040	<W 0.002	0.0066
SEP 23,83	SEP 22,83	******	0.44	******	******	******	******	G 0.0005
SEP 24,83	SEP 23,83	0.19	0.07	0.030	<T 0.010	0.045	<W 0.002	0.0229
SEP 26,83	SEP 25,83	0.60	0.19	0.095	0.050	0.035	0.276	0.0794
SEP 28,83	SEP 27,83	******	******	******	******	******	******	******
OCT 4,83	OCT 3,83	0.96	0.14	0.195	0.050	0.030	0.560	0.0162
OCT 5,83	OCT 4,83	0.45	0.20	0.055	0.060	0.030	0.960	0.0741
OCT 6,83	OCT 5,83	0.11	0.07	0.010	0.015	0.020	0.088	0.0295
OCT 7,83	OCT 6,83	0.19	0.02	0.025	0.055	0.065	0.094	G 0.0036
OCT 8,83	OCT 7,83	0.61	0.16	0.100	0.055	<T 0.010	0.304	0.0437
OCT 9,83	OCT 8,83	0.26	0.26	0.035	0.050	0.070	0.176	0.0417
OCT 12,83	OCT 11,83	******	0.59	******	******	******	0.142	0.0195
OCT 13,83	OCT 12,83	0.07	<W 0.01	0.020	<T 0.010	0.065	0.080	0.0076
OCT 14,83	OCT 13,83	0.11	<W 0.01	0.020	0.020	D 0.025	0.100	0.0166
OCT 15,83	OCT 14,83	0.34	<W 0.01	0.065	0.060	U 0.025	0.302	U 0.0050
OCT 23,83	OCT 22,83	0.17	0.03	0.030	0.020	0.125	0.102	0.0363
OCT 24,83	OCT 23,83	0.11	0.03	0.020	<T 0.015	0.045	0.128	0.0417
OCT 26,83	OCT 25,83	******	0.29	******	******	******	0.342	0.0646
OCT 27,83	OCT 26,83	0.14	0.15	0.025	<T 0.010	0.040	<W 0.002	G 0.0048
OCT 29,83	OCT 28,83	1.26	0.24	0.200	0.120	0.145	0.840	U 0.0000
NOV 2,83	NOV 1,83	0.29	0.28	0.035	0.085	0.120	0.840	0.1072
NOV 3,83	NOV 2,83	0.27	0.27	0.035	0.065	0.130	1.140	0.1096
NOV 4,83	NOV 3,83	******	******	******	******	******	******	******
NOV 5,83	NOV 4,83	0.08	0.06	0.010	0.130	0.090	<T 0.002	G 0.0030
NOV 11,83	NOV 10,83	0.15	0.20	0.020	0.040	0.060	0.510	0.0724
NOV 12,83	NOV 11,83	0.11	0.07	0.010	<T 0.010	0.035	<W 0.002	G 0.0019
NOV 16,83	NOV 15,83	0.11	0.11	0.015	0.025	0.065	0.092	0.0269

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAVEN LAKE/DAILY/AEROCHEM #05 PAGE : 10

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
NOV 17,83	NOV 16,83	830	830	1300	1800	2	5.9	2	28958	2	1	66		M
NOV 19,83	NOV 18,83	830	830	2000	2400	2	2.1	2	28959	2	1	80		
NOV 21,83	NOV 20,83	830	830	1615	2200	1	8.5	2	28960	2	1	103		J
NOV 22,83	NOV 21,83	830	830	930	1015	1	0.5	2	28961	2	1	156		N
NOV 24,83	NOV 23,83	830	830	1700	1900	1	3.3	2	28962	2	1	108		
NOV 29,83	NOV 28,83	830	830	2000	2100	1	7.3	2	28963	2	1	104		
NOV 30,83	NOV 29,83	830	830	1545	1900	2	3.3	2	28964	2	1	60		
DEC 1,83	NOV 30,83	830	830	830	1000	2	2.3	2	28965	2	1	23		N
DEC 2,83	DEC 1,83	830	830	2000	2200	2	0.9	2	28966	2	1	50	A	
DEC 3,83	DEC 2,83	830	830	1200	1600	2	1.5	2	28967	2	1	31		N
DEC 5,83	DEC 4,83	830	830	830	1115	3	3.9	2	28968	2	1	65		
DEC 6,83	DEC 5,83	830	830	200	830	3	9.1	2	28969	2	1	92		J
DEC 7,83	DEC 6,83	830	830	830	1900	2	24.5	2	28970	2	1	52		M
DEC 9,83	DEC 8,83	830	830	1730	1830	2	0.7	2	28971	2	1	78		
DEC 10,83	DEC 9,83	830	830	1430	1600	2	0.9	2	28972	2	1	19		N
DEC 12,83	DEC 11,83	830	830	400	600	1	6.1	2	28973	2	1	37		N
DEC 13,83	DEC 12,83	830	830	900	1400	1	5.3	2	28974	2	1	90		
DEC 15,83	DEC 14,83	830	830	2000	2200	1	1.7	2	28975	2	1	83		
DEC 16,83	DEC 15,83	830	830	730	830	2	0.8	2	28976	2	1	25		N
DEC 18,83	DEC 17,83	830	830	1300	1500	2	1.2	2	28977	2	1	54		
DEC 22,83	DEC 21,83	900	900	****	****	1	19.8	2	28978	2	1	51		
DEC 23,83	DEC 22,83	900	900	****	****	2	3.8	2	28979	2	1	81	BC	J
DEC 28,83	DEC 27,83	900	900	****	****	1	5.0	2	28980	2	1	55		C
DEC 29,83	DEC 28,83	900	900	****	****	2	13.0	2	28981	2	1	65		HM

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAVEN LAKE/DAILY/AEROCHEM #05

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
NOV 17,83	NOV 16,83	253.0	16.0	4.16	4.58	0.0482	1.10	0.28
NOV 19,83	NOV 18,83	108.0	36.0	******	4.27	0.0744	2.80	0.95
NOV 21,83	NOV 20,83	563.0	26.3	3.86	4.32	0.0658	2.05	0.53
NOV 22,83	NOV 21,83	50.0	41.8	******	4.61	0.0500	5.25	D 1.59
NOV 24,83	NOV 23,83	230.0	66.0	3.49	3.89	0.1506	4.80	1.56
NOV 29,83	NOV 28,83	487.0	26.7	3.89	4.28	0.0790	2.05	0.55
NOV 30,83	NOV 29,83	129.0	29.6	******	4.28	0.0654	1.80	0.80
DEC 1,83	NOV 30,83	34.0	******	******	U 7.38	0.0122	1.80	0.20
DEC 2,83	DEC 1,83	29.0	******	******	U 6.84	0.0156	1.25	0.12
DEC 3,83	DEC 2,83	30.0	******	******	4.79	0.0402	1.65	1.21
DEC 5,83	DEC 4,83	164.0	6.6	******	G 5.19	0.0252	0.40	0.16
DEC 6,83	DEC 5,83	539.0	14.5	3.99	4.64	0.0518	1.10	0.43
DEC 7,83	DEC 6,83	830.0	8.2	4.41	4.91	0.0336	0.70	0.13
DEC 9,83	DEC 8,83	35.0	******	******	4.16	0.0938	1.55	A 2.15
DEC 10,83	DEC 9,83	11.0	******	******	******	******	******	******
DEC 12,83	DEC 11,83	148.0	15.0	******	4.72	0.0378	1.20	0.24
DEC 13,83	DEC 12,83	308.0	19.5	4.05	4.46	0.0520	2.00	0.21
DEC 15,83	DEC 14,83	91.0	******	******	3.87	0.1600	4.45	1.55
DEC 16,83	DEC 15,83	13.0	******	******	4.27	0.0858	******	******
DEC 18,83	DEC 17,83	42.0	******	******	5.00	0.0292	0.65	0.40
DEC 22,83	DEC 21,83	660.0	12.0	4.35	4.68	0.0380	0.60	0.30
DEC 23,83	DEC 22,83	198.0	U 66.0	U 6.55	U 7.49	D 0.0210	3.70	0.37
DEC 28,83	DEC 27,83	179.0	21.8	4.03	4.18	0.0846	0.50	0.94
DEC 29,83	DEC 28,83	544.0	3.8	4.66	G 5.16	0.0252	0.20	0.14

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAVEN LAKE/DAILY/AEROCHEM #05

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
NOV 17,83	NOV 16,83	0.10	0.07	0.015	<T 0.015	0.025	<W 0.002	0.0263
NOV 19,83	NOV 18,83	0.53	0.38	0.045	0.050	0.145	0.364	0.0537
NOV 21,83	NOV 20,83	0.16	0.23	0.025	0.025	0.100	0.238	0.0479
NOV 22,83	NOV 21,83	******	0.50	******	******	******	******	0.0245
NOV 24,83	NOV 23,83	0.69	0.44	0.050	0.065	0.155	0.310	0.1288
NOV 29,83	NOV 28,83	0.13	0.11	0.020	0.020	0.050	0.156	0.0525
NOV 30,83	NOV 29,83	0.24	0.21	D 0.035	0.030	0.060	0.258	0.0525
DEC 1,83	NOV 30,83	******	0.54	******	******	******	******	U 0.0000
DEC 2,83	DEC 1,83	******	0.59	******	******	******	******	U 0.0001
DEC 3,83	DEC 2,83	******	B 1.17	******	******	******	******	0.0162
DEC 5,83	DEC 4,83	0.14	0.13	0.025	0.020	0.050	0.020	G 0.0065
DEC 6,83	DEC 5,83	0.17	0.16	0.015	0.040	0.050	0.192	0.0229
DEC 7,83	DEC 6,83	0.08	0.07	0.010	<T 0.010	0.030	0.010	0.0123
DEC 9,83	DEC 8,83	******	B 2.00	******	******	******	******	0.0692
DEC 10,83	DEC 9,83	******	******	******	******	******	******	******
DEC 12,83	DEC 11,83	0.23	0.27	0.030	0.040	0.200	******	0.0191
DEC 13,83	DEC 12,83	0.21	0.13	0.020	0.030	0.075	0.064	0.0347
DEC 15,83	DEC 14,83	0.49	0.62	0.075	0.055	0.250	******	0.1349
DEC 16,83	DEC 15,83	******	******	******	******	******	******	0.0537
DEC 18,83	DEC 17,83	******	0.60	******	******	******	******	0.0100
DEC 22,83	DEC 21,83	0.06	0.07	0.010	<W 0.005	0.030	0.066	0.0209
DEC 23,83	DEC 22,83	******	U 0.72	******	******	******	******	U 0.0000
DEC 28,83	DEC 27,83	0.29	0.52	0.035	0.020	0.130	<T 0.002	0.0661
DEC 29,83	DEC 28,83	D 0.32	0.06	0.010	<W 0.005	0.030	0.010	G 0.0069

PART V

SOUTHEASTERN REGION

DAILY PRECIPITATION CHEMISTRY LISTINGS

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CHARLESTON LAKE/DAILY/AEROCHEM #11 PAGE : 1

REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR.	SAMPLING START/END HR.	PRECIP START/END HR.	PRECIP START/END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES		SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
JAN 6,83	JAN 5,83	900	900	1800	400	3	0.8	2	23362	2	1		31		N
JAN 7,83	JAN 6,83	900	1100	200	1100	3	3.3	2	23363	2	1		13		N
JAN 8,83	JAN 7,83	1100	1100	1100	2000	3	0.4	2	23364	2	1		148		N
JAN 11,83	JAN 10,83	900	920	930	920	1	26.0	2	23365	2	1		95		
JAN 12,83	JAN 11,83	920	745	2400	600	2	2.7	2	23366	2	1		52		
JAN 13,83	JAN 12,83	745	910	930	1300	2	0.9	2	23367	2	1		****	EF	
JAN 24,83	JAN 23,83	800	900	1000	900	3	10.0	2	23368	2	1		70		
JAN 25,83	JAN 24,83	900	1015	900	1015	3	0.1	2	23369	2	1	U	218	P	N
JAN 31,83	JAN 30,83	900	900	1000	800	3	4.9	2	23370	2	1		55		
FEB 3,83	FEB 2,83	900	1000	900	600	1	43.3	2	23371	2	1		101		
FEB 5,83	FEB 4,83	900	1000	1100	1700	3	5.3	2	23372	2	1		40		N
FEB 8,83	FEB 7,83	900	900	1000	400	2	11.1	2	23373	2	1		49		N
FEB 23,83	FEB 22,83	800	900	1800	700	3	16.8	2	23374	2	1		105		
MAR 7,83	MAR 6,83	900	935	2300	600	1	3.0	2	23375	2	1		98		
MAR 9,83	MAR 8,83	900	915	1900	2100	1	4.3	2	23376	2	1		27		N
MAR 10,83	MAR 9,83	915	1000	2300	600	3	6.7	2	23377	2	1		60		
MAR 15,83	MAR 14,83	1330	900	30	100	1	0.5	2	23378	2	1		3	E	N
MAR 19,83	MAR 18,83	900	915	2000	800	1	15.4	2	23379	2	1		90		J
MAR 20,83	MAR 19,83	915	945	1300	1500	1	3.7	2	23380	2	1		61		
MAR 21,83	MAR 20,83	945	945	****	****	1	0.6	2	23381	2	1		****	EF	
MAR 22,83	MAR 21,83	945	815	1000	1600	3	19.5	2	23382	2	1		53		
MAR 23,83	MAR 22,83	815	830	815	1000	2	0.3	2	23383	2	1		****	EF	
MAR 28,83	MAR 27,83	900	930	1200	2100	2	19.3	2	23384	2	1		37		N
MAR 29,83	MAR 28,83	930	915	1600	2100	3	0.3	2	23385	2	1		41	E	N
APR 3,83	APR 2,83	900	900	2400	700	3	9.0	2	23386	2	1		97		JC
APR 4,83	APR 3,83	900	1000	1100	900	1	2.3	2	23387	2	1		2	E	N
APR 8,83	APR 7,83	900	745	915	2200	1	4.6	2	23388	2	1		99		
APR 10,83	APR 9,83	900	1000	2100	1000	1	11.3	2	23389	2	1		81		JC
APR 11,83	APR 10,83	1000	755	1000	2300	1	6.8	2	23390	2	1		75		C
APR 15,83	APR 14,83	900	755	2300	755	1	7.7	2	23391	2	1		89		
APR 16,83	APR 15,83	755	945	755	945	3	18.3	2	23392	2	1		77		
APR 20,83	APR 19,83	745	800	1300	2100	2	8.9	2	23393	2	1		48		N
APR 21,83	APR 20,83	800	750	1100	750	2	10.1	2	23394	2	1		69		HCM
APR 22,83	APR 21,83	750	755	900	1400	2	0.5	2	23395	2	1	U	499	P	NH
APR 25,83	APR 24,83	750	615	1200	615	3	5.9	2	23396	2	1		72		
APR 26,83	APR 25,83	615	815	900	1200	3	11.3	2	23397	2	1		69		JHCM
APR 29,83	APR 28,83	****	745	****	****	1	2.3	2	23398	2	1		111		
MAY 1,83	APR 30,83	900	1000	1800	2400	1	11.3	2	23399	2	1		93		
MAY 2,83	MAY 1,83	1000	1200	2400	1000	1	11.3	2	23400	2	1		94		C
MAY 3,83	MAY 2,83	1200	745	1730	2130	1	6.8	2	23401	2	1		105		C

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CHARLESTON LAKE/DAILY/AEROCHEM #11

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
JAN 6,83	JAN 5,83	16.0	******	******	4.46	0.0828	******	******
JAN 7,83	JAN 6,83	28.0	******	******	3.78	0.1996	******	******
JAN 8,83	JAN 7,83	38.0	******	******	4.50	0.0650	4.00	0.78
JAN 11,83	JAN 10,83	1598.0	10.6	4.76	4.66	0.0432	0.70	0.14
JAN 12,83	JAN 11,83	90.0	******	******	4.54	0.0434	0.90	0.36
JAN 13,83	JAN 12,83	******	******	******	******	******	******	******
JAN 24,83	JAN 23,83	449.0	16.5	4.47	4.50	0.0568	1.05	0.30
JAN 25,83	JAN 24,83	14.0	******	******	4.35	0.0704	******	******
JAN 31,83	JAN 30,83	174.0	******	4.06	4.03	0.1196	3.50	0.80
FEB 3,83	FEB 2,83	2826.0	14.0	4.54	4.46	0.0548	1.10	0.18
FEB 5,83	FEB 4,83	138.0	******	******	4.29	0.0752	1.60	0.42
FEB 8,83	FEB 7,83	350.0	7.8	4.85	4.75	0.0466	0.35	0.14
FEB 23,83	FEB 22,83	1138.0	53.0	3.90	3.90	0.1396	3.95	0.98
MAR 7,83	MAR 6,83	190.0	29.0	4.21	4.19	0.0774	2.35	0.37
MAR 9,83	MAR 8,83	76.0	******	******	4.61	0.0390	0.75	0.13
MAR 10,83	MAR 9,83	258.0	10.5	4.85	4.74	0.0338	0.70	0.11
MAR 15,83	MAR 14,83	1.0	******	******	******	******	******	******
MAR 19,83	MAR 18,83	889.0	3.2	G 5.26	G 5.94	0.0186	0.25	0.08
MAR 20,83	MAR 19,83	146.0	5.6	******	G 5.94	0.0220	0.60	0.12
MAR 21,83	MAR 20,83	******	******	******	******	******	******	******
MAR 22,83	MAR 21,83	665.0	14.8	4.52	4.64	0.0434	1.45	0.10
MAR 23,83	MAR 22,83	******	******	******	******	******	******	******
MAR 28,83	MAR 27,83	462.0	12.6	4.44	4.69	0.0394	1.00	0.15
MAR 29,83	MAR 28,83	8.0	******	******	******	******	******	******
APR 3,83	APR 2,83	562.0	6.9	4.60	5.22	0.0254	0.45	0.15
APR 4,83	APR 3,83	4.0	******	******	******	******	******	******
APR 8,83	APR 7,83	292.0	******	3.93	4.02	0.1208	3.30	0.88
APR 10,83	APR 9,83	587.0	5.4	4.92	G 5.53	0.0180	0.35	0.04
APR 11,83	APR 10,83	331.0	6.9	4.79	5.16	0.0228	0.45	0.11
APR 15,83	APR 14,83	444.0	39.1	4.06	4.19	0.0884	3.30	0.60
APR 16,83	APR 15,83	912.0	26.9	4.18	4.31	0.0682	1.25	0.58
APR 20,83	APR 19,83	276.0	******	5.09	5.21	0.0252	0.50	0.15
APR 21,83	APR 20,83	451.0	11.3	4.77	5.12	0.0280	1.20	0.04
APR 22,83	APR 21,83	160.0	******	******	G 5.51	0.0242	1.00	0.14
APR 25,83	APR 24,83	275.0	15.1	4.62	4.67	0.0464	1.55	0.14
APR 26,83	APR 25,83	500.0	2.8	G 5.15	G 5.78	D 0.1114	0.30	0.03
APR 29,83	APR 28,83	165.0	U 105.5	******	U 3.85	U 0.2020	U 13.50	U 1.94
MAY 1,83	APR 30,83	676.0	42.4	4.26	4.18	0.0944	3.50	0.39
MAY 2,83	MAY 1,83	681.0	33.2	4.38	4.45	0.0624	2.90	0.30
MAY 3,83	MAY 2,83	460.0	20.8	4.54	4.67	0.0422	1.90	0.23

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CHARLESTON LAKE/DAILY/AEROCHEM #11 PAGE : 3

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
JAN 6,83	JAN 5,83	******	******	******	******	******	******	0.0347
JAN 7,83	JAN 6,83	******	******	******	******	******	******	0.1660
JAN 8,83	JAN 7,83	******	******	******	******	******	******	0.0316
JAN 11,83	JAN 10,83	<T 0.02	0.08	0.005	<T 0.005	0.030	0.028	0.0219
JAN 12,83	JAN 11,83	<T 0.01	0.08	0.005	<T 0.010	0.040	******	0.0288
JAN 13,83	JAN 12,83	******	******	******	******	******	******	******
JAN 24,83	JAN 23,83	0.03	0.08	0.005	<W 0.005	0.020	0.112	0.0316
JAN 25,83	JAN 24,83	******	******	******	******	******	******	0.0447
JAN 31,83	JAN 30,83	0.09	0.13	0.025	0.110	0.030	0.600	0.0933
FEB 3,83	FEB 2,83	0.02	0.09	<T 0.005	<W 0.005	0.025	0.072	0.0347
FEB 5,83	FEB 4,83	0.04	0.09	<W 0.005	0.010	0.020	0.228	0.0513
FEB 8,83	FEB 7,83	0.06	0.08	0.015	<T 0.005	0.020	0.008	0.0178
FEB 23,83	FEB 22,83	0.06	0.17	0.015	0.020	0.035	0.730	0.1259
MAR 7,83	MAR 6,83	0.13	0.24	0.035	0.020	0.150	0.234	0.0646
MAR 9,83	MAR 8,83	0.08	0.09	0.010	<T 0.005	0.050	******	0.0245
MAR 10,83	MAR 9,83	0.09	0.07	0.015	<T 0.005	0.035	0.068	0.0182
MAR 15,83	MAR 14,83	******	******	******	******	******	******	******
MAR 19,83	MAR 18,83	0.04	0.07	0.010	<T 0.005	0.045	0.132	G 0.0011
MAR 20,83	MAR 19,83	0.10	0.26	0.030	0.030	0.160	0.216	G 0.0011
MAR 21,83	MAR 20,83	******	******	******	******	******	******	******
MAR 22,83	MAR 21,83	0.13	<T 0.01	0.025	0.015	0.010	0.090	0.0229
MAR 23,83	MAR 22,83	******	******	******	******	******	******	******
MAR 28,83	MAR 27,83	0.06	<W 0.10	<W 0.005	0.010	0.015	0.066	0.0204
MAR 29,83	MAR 28,83	******	******	******	******	******	******	******
APR 3,83	APR 2,83	0.12	0.02	0.025	0.015	0.020	0.078	0.0060
APR 4,83	APR 3,83	******	******	******	******	******	******	******
APR 8,83	APR 7,83	0.15	0.09	0.020	0.030	0.040	0.204	0.0955
APR 10,83	APR 9,83	0.04	0.02	0.010	0.020	0.030	0.032	G 0.0030
APR 11,83	APR 10,83	0.05	0.03	0.010	0.030	0.030	0.038	0.0069
APR 15,83	APR 14,83	0.28	0.31	0.040	0.040	0.170	0.246	0.0646
APR 16,83	APR 15,83	0.06	0.06	0.010	0.030	D 0.040	0.088	0.0490
APR 20,83	APR 19,83	0.20	0.18	0.055	0.015	0.080	0.030	0.0062
APR 21,83	APR 20,83	0.04	0.03	0.020	0.035	0.020	0.066	0.0076
APR 22,83	APR 21,83	0.05	0.03	0.015	0.020	<W 0.005	0.290	G 0.0031
APR 25,83	APR 24,83	0.04	0.02	0.015	0.030	<W 0.005	0.146	0.0214
APR 26,83	APR 25,83	0.04	<T 0.01	0.015	0.015	<W 0.005	0.018	G 0.0017
APR 29,83	APR 28,83	U 2.05	U 0.47	U 0.305	U 0.130	U 0.165	U 2.400	U 0.1413
MAY 1,83	APR 30,83	0.13	0.10	0.025	0.035	0.050	0.420	0.0661
MAY 2,83	MAY 1,83	0.11	0.10	0.030	0.040	0.100	0.490	0.0355
MAY 3,83	MAY 2,83	0.35	0.05	0.035	0.030	0.045	0.192	0.0214

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CHARLESTON LAKE/DAILY/AEROCHEM #11 PAGE : 4

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
MAY 4,83	MAY 3,83	745	745	2300	500	1	6.6	1	23402	2	1	88		
MAY 5,83	MAY 4,83	745	745	745	900	1	2.4	1	23403	2	1	10		N
MAY 8,83	MAY 7,83	900	1000	500	1000	1	12.7	1	23404	2	1	56		
MAY 9,83	MAY 8,83	1000	1000	1000	2100	1	6.8	1	23405	2	1	84		
MAY 15,83	MAY 14,83	900	900	300	600	1	6.2	1	23406	2	1	89		
MAY 20,83	MAY 19,83	900	800	1700	300	1	12.5	1	23407	2	1	78		
MAY 23,83	MAY 22,83	900	900	1700	500	1	4.8	1	23408	2	1	60		
MAY 30,83	MAY 29,83	800	800	200	800	1	7.6	1	23410	2	1	78		J
MAY 31,83	MAY 30,83	800	800	800	930	1	3.8	1	23411	2	1	57		
JUN 4,83	JUN 3,83	800	900	300	900	1	2.5	1	23412	2	1	21		N
JUN 7,83	JUN 6,83	900	830	930	1830	1	4.2	1	23413	2	1	54		
JUN 26,83	JUN 25,83	900	800	1800	500	1	7.0	1	23409	2	1	86		
JUL 3,83	JUL 2,83	800	1000	945	1030	1	10.7	1	23418	2	1	103		
JUL 5,83	JUL 4,83	800	745	2145	2230	1	1.4	1	23419	2	1	45		N
JUL 9,83	JUL 8,83	800	1100	1900	2230	1	1.0	1	23420	2	1	6	E	N
JUL 22,83	JUL 21,83	800	800	1800	2000	1	0.4	1	23421	2	1	19	E	N
JUL 30,83	JUL 29,83	800	740	830	1200	1	6.5	1	23422	2	1	84		
AUG 1,83	JUL 31,83	800	1000	1100	400	1	27.8	1	23423	2	1	95		M
AUG 7,83	AUG 6,83	800	1000	2000	2200	1	1.2	1	23426	2	1	7	E	N
AUG 9,83	AUG 8,83	800	800	1800	2230	1	2.0	1	23427	2	1	48		N
AUG 12,83	AUG 11,83	800	1000	1200	2100	1	3.4	1	23428	2	1	47		NM
AUG 18,83	AUG 17,83	800	900	100	600	1	2.8	1	23429	2	1	92		
AUG 20,83	AUG 19,83	800	900	1730	2230	1	1.0	1	23430	2	1	20	E	N
AUG 22,83	AUG 21,83	900	900	100	900	1	5.8	1	23431	2	1	121		N
AUG 28,83	AUG 27,83	800	715	1600	2130	1	23.6	1	23432	2	1	90		
AUG 31,83	AUG 30,83	800	730	1830	2400	1	12.2	1	23435	2	1	87		
SEP 7,83	SEP 6,83	800	745	1445	1515	1	0.7	1	23437	2	1	****	EF	
SEP 10,83	SEP 9,83	800	830	2200	400	1	1.7	1	23438	2	1	42		N
SEP 11,83	SEP 10,83	830	900	1930	2300	1	1.6	1	23439	2	1	128		N
SEP 17,83	SEP 16,83	800	930	1900	900	1	5.6	1	23440	2	1	67		
SEP 18,83	SEP 17,83	930	930	1500	1700	1	1.2	1	23441	2	1	41		N
SEP 19,83	SEP 18,83	930	755	1200	600	1	1.8	1	23442	2	1	94		
SEP 22,83	SEP 21,83	800	900	1230	1800	1	23.8	1	23443	2	1	101		J
SEP 23,83	SEP 22,83	900	900	1800	2000	1	5.0	1	23444	2	1	91		JHM
SEP 24,83	SEP 23,83	900	900	1400	1900	1	3.5	1	23445	2	1	72		HM
OCT 4,83	OCT 3,83	800	800	2400	500	1	2.1	1	23446	2	1	10		N
OCT 5,83	OCT 4,83	800	800	2400	800	1	19.3	1	23447	2	1	90		
OCT 6,83	OCT 5,83	800	745	600	500	1	34.4	1	23450	2	1	96		
OCT 9,83	OCT 8,83	800	1000	1200	1800	1	9.6	1	23451	2	1	71		
OCT 12,83	OCT 11,83	800	745	2400	530	1	1.0	1	23452	2	1	104		

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CHARLESTON LAKE/DAILY/AEROCHEM #11

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
MAY 4,83	MAY 3,83	376.0	42.1	4.11	4.13	0.1046	3.80	0.58
MAY 5,83	MAY 4,83	16.0	******	******	B 5.46	0.0254	******	******
MAY 8,83	MAY 7,83	458.0	******	4.28	4.33	0.0750	******	******
MAY 9,83	MAY 8,83	368.0	******	4.45	4.58	******	******	******
MAY 15,83	MAY 14,83	355.0	21.5	4.48	4.46	0.0606	1.90	0.21
MAY 20,83	MAY 19,83	632.0	20.9	4.49	4.47	D 0.0576	1.90	0.30
MAY 23,83	MAY 22,83	187.0	******	4.80	******	0.0200	D 0.70	0.12
MAY 30,83	MAY 29,83	383.0	35.1	U 6.42	4.23	0.0930	3.65	0.41
MAY 31,83	MAY 30,83	140.0	******	******	4.29	0.0836	3.00	0.43
JUN 4,83	JUN 3,83	35.0	******	******	5.04	******	1.20	0.25
JUN 7,83	JUN 6,83	147.0	******	******	4.05	0.1296	5.30	0.51
JUN 26,83	JUN 25,83	386.0	32.0	4.23	4.25	0.0832	2.40	0.52
JUL 3,83	JUL 2,83	708.0	36.3	4.15	4.31	0.0832	4.05	0.77
JUL 5,83	JUL 4,83	41.0	******	******	3.93	0.1552	6.85	0.67
JUL 9,83	JUL 8,83	4.0	******	******	******	******	******	******
JUL 22,83	JUL 21,83	5.0	******	******	******	******	******	******
JUL 30,83	JUL 29,83	350.0	61.5	3.93	4.13	0.1384	6.75	D 0.84
AUG 1,83	JUL 31,83	1706.0	40.4	4.11	4.27	0.1004	3.80	0.39
AUG 7,83	AUG 6,83	6.0	******	******	******	******	******	******
AUG 9,83	AUG 8,83	62.0	******	******	G 5.94	0.0332	D 6.00	1.37
AUG 12,83	AUG 11,83	103.0	24.5	******	4.47	0.0676	2.60	0.18
AUG 18,83	AUG 17,83	166.0	86.0	******	3.80	0.2040	7.45	0.92
AUG 20,83	AUG 19,83	13.0	******	******	******	******	******	******
AUG 22,83	AUG 21,83	452.0	30.6	4.11	4.32	******	3.10	0.25
AUG 28,83	AUG 27,83	1363.0	21.0	4.29	4.57	0.0578	2.50	0.22
AUG 31,83	AUG 30,83	688.0	15.5	4.48	4.79	0.0416	1.45	0.38
SEP 7,83	SEP 6,83	******	******	******	******	******	******	******
SEP 10,83	SEP 9,83	46.0	******	******	******	******	6.50	1.08
SEP 11,83	SEP 10,83	132.0	38.0	******	4.30	0.0824	4.35	0.75
SEP 17,83	SEP 16,83	243.0	49.4	3.88	******	******	3.50	0.78
SEP 18,83	SEP 17,83	32.0	******	******	******	******	6.50	1.17
SEP 19,83	SEP 18,83	109.0	45.8	******	******	******	5.00	0.70
SEP 22,83	SEP 21,83	1550.0	14.5	3.78	4.55	0.0468	1.90	D 0.16
SEP 23,83	SEP 22,83	293.0	5.0	U 5.38	U 7.12	0.0150	0.75	0.22
SEP 24,83	SEP 23,83	163.0	2.5	******	U 7.16	0.0144	0.15	0.09
OCT 4,83	OCT 3,83	14.0	******	******	******	******	******	******
OCT 5,83	OCT 4,83	1123.0	D 30.0	******	D 4.26	D 0.0768	3.55	0.49
OCT 6,83	OCT 5,83	2133.0	15.6	4.18	4.54	0.0492	1.70	0.17
OCT 9,83	OCT 8,83	443.0	10.2	4.38	4.76	0.0386	1.05	0.14
OCT 12,83	OCT 11,83	67.0	******	******	4.76	0.0364	1.20	0.10

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CHARLESTON LAKE/DAILY/AEROCHEM #11

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
MAY 4,83	MAY 3,83	0.16	0.12	0.030	0.075	0.090	0.520	0.0741
MAY 5,83	MAY 4,83	******	******	******	******	******	******	B 0.0035
MAY 8,83	MAY 7,83	******	******	******	******	******	******	0.0468
MAY 9,83	MAY 8,83	******	******	******	******	******	******	0.0263
MAY 15,83	MAY 14,83	0.11	0.07	0.020	0.035	0.015	0.210	0.0347
MAY 20,83	MAY 19,83	0.20	0.12	0.035	0.040	0.050	0.350	0.0339
MAY 23,83	MAY 22,83	0.10	0.05	0.020	0.050	0.015	0.360	******
MAY 30,83	MAY 29,83	0.07	0.09	0.020	0.030	0.030	0.480	0.0589
MAY 31,83	MAY 30,83	0.28	0.11	0.060	0.080	0.090	0.280	0.0513
JUN 4,83	JUN 3,83	******	0.09	******	******	******	******	0.0091
JUN 7,83	JUN 6,83	0.24	0.10	0.045	0.025	0.020	0.460	0.0891
JUN 26,83	JUN 25,83	0.07	0.05	0.020	0.010	0.020	0.240	0.0562
JUL 3,83	JUL 2,83	0.32	0.13	0.055	0.040	0.045	0.830	0.0490
JUL 5,83	JUL 4,83	******	0.37	******	******	******	******	0.1175
JUL 9,83	JUL 8,83	******	******	******	******	******	******	******
JUL 22,83	JUL 21,83	******	******	******	******	******	******	******
JUL 30,83	JUL 29,83	0.47	0.18	0.050	0.055	0.065	0.910	0.0741
AUG 1,83	JUL 31,83	0.10	0.09	0.010	0.015	<T 0.010	0.274	0.0537
AUG 7,83	AUG 6,83	******	******	******	******	******	******	******
AUG 9,83	AUG 8,83	******	0.32	******	******	******	D 0.800	G 0.0011
AUG 12,83	AUG 11,83	0.17	0.07	0.020	0.025	<T 0.010	0.072	0.0339
AUG 18,83	AUG 17,83	0.24	0.13	0.040	<T 0.010	0.020	0.266	0.1585
AUG 20,83	AUG 19,83	******	******	******	******	******	******	******
AUG 22,83	AUG 21,83	0.14	0.03	0.050	0.030	0.030	0.254	0.0479
AUG 28,83	AUG 27,83	0.11	0.03	0.010	0.040	0.030	0.450	0.0269
AUG 31,83	AUG 30,83	0.36	0.06	0.040	0.035	<T 0.010	0.310	0.0162
SEP 7,83	SEP 6,83	******	******	******	******	******	******	******
SEP 10,83	SEP 9,83	******	0.31	******	******	******	0.530	******
SEP 11,83	SEP 10,83	0.81	0.19	0.160	0.070	0.135	0.500	0.0501
SEP 17,83	SEP 16,83	0.16	0.33	0.045	0.020	0.200	0.326	******
SEP 18,83	SEP 17,83	******	0.21	******	******	******	******	******
SEP 19,83	SEP 18,83	0.72	0.16	0.105	0.080	0.045	0.550	******
SEP 22,83	SEP 21,83	0.18	0.13	D 0.020	0.030	0.105	0.098	0.0282
SEP 23,83	SEP 22,83	0.42	0.03	0.025	0.020	<W 0.005	0.234	U 0.0001
SEP 24,83	SEP 23,83	0.26	<W 0.01	0.025	<T 0.010	<W 0.005	0.114	U 0.0001
OCT 4,83	OCT 3,83	******	******	******	******	******	******	******
OCT 5,83	OCT 4,83	0.32	0.08	0.045	D 0.040	<W 0.005	0.470	D 0.0550
OCT 6,83	OCT 5,83	0.04	0.02	<W 0.005	<T 0.005	<W 0.005	0.210	0.0288
OCT 9,83	OCT 8,83	0.05	<W 0.01	<W 0.005	<T 0.015	<W 0.005	0.144	0.0174
OCT 12,83	OCT 11,83	******	G 1.44	******	******	******	******	0.0174

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CHARLESTON LAKE/DAILY/AEROCHEM #11 PAGE : 7

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
OCT 13,83	OCT 12,83	745	800	1430	600	1	12.1	1	23453	2	1	87		C
OCT 14,83	OCT 13,83	800	1000	2100	300	1	10.0	1	23454	2	1	92		J
OCT 24,83	OCT 23,83	800	745	900	2030	1	17.0	1	23455	2	1	96		C
OCT 26,83	OCT 25,83	800	800	100	800	1	2.6	1	23456	2	1	66		
OCT 27,83	OCT 26,83	800	755	800	755	1	2.4	1	23457	2	1	38		N
NOV 3,83	NOV 2,83	800	820	1200	820	1	15.6	1	23458	2	1	85		
NOV 4,83	NOV 3,83	820	830	820	1000	3	****	1	23459	2	1	****		
NOV 5,83	NOV 4,83	830	1000	830	2130	3	15.2	1	23460	2	1	91		JHM
NOV 7,83	NOV 6,83	1000	800	****	****	1	0.2	1	23461	2	1	****	EF	
NOV 10,83	NOV 9,83	800	1000	****	****	1	0.6	1	23462	2	1	****	E	
NOV 11,83	NOV 10,83	1000	800	1900	800	1	14.0	1	23463	2	1	72		C
NOV 12,83	NOV 11,83	800	845	1600	200	3	6.4	1	23464	2	1	****	E	
NOV 13,83	NOV 12,83	845	815	****	****	2	****	*	23465	2	1	****		
NOV 16,83	NOV 15,83	900	910	1000	910	3	28.6	1	23467	2	1	97		
NOV 17,83	NOV 16,83	910	830	910	830	3	6.1	1	23470	2	1	U 28	F	
NOV 21,83	NOV 20,83	900	830	****	****	1	19.6	1	23471	2	1	100		
NOV 29,83	NOV 28,83	900	815	1000	400	1	12.6	2	23472	2	1	88		J
DEC 3,83	DEC 2,83	830	930	1530	400	2	1.4	2	23474	2	1	****	EF	
DEC 5,83	DEC 4,83	900	900	930	2100	2	11.0	2	23475	2	1	52		C
DEC 6,83	DEC 5,83	900	830	2100	830	3	5.0	2	23476	2	1	37		N
DEC 7,83	DEC 6,83	830	930	830	900	3	17.6	2	23477	2	1	41		N
DEC 10,83	DEC 9,83	900	840	930	1830	2	6.8	2	23478	2	1	63		
DEC 12,83	DEC 11,83	900	925	200	2100	1	29.9	1	23479	2	1	99		
DEC 15,83	DEC 13,83	925	1030	****	****	1	21.0	2	23480	2	1	93		HCMY2
DEC 16,83	DEC 15,83	1030	1050	1100	600	2	1.5	2	23481	2	1	88		
DEC 22,83	DEC 21,83	900	1030	100	1030	3	21.9	2	23482	2	1	82		M
DEC 23,83	DEC 22,83	1030	930	1030	2330	3	10.5	2	23483	2	1	103		
DEC 27,83	DEC 26,83	900	930	1530	930	2	2.1	2	23484	2	1	5	E	N
DEC 28,83	DEC 27,83	930	945	930	945	2	1.9	2	23485	2	1	3	E	N
DEC 29,83	DEC 28,83	945	930	945	300	2	14.0	2	23486	2	1	82	C	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CHARLESTON LAKE/DAILY/AEROCHEM #11

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
OCT 13,83	OCT 12,83	677.0	4.8	4.79	G 5.34	0.0218	0.15	0.05
OCT 14,83	OCT 13,83	596.0	7.5	4.40	4.95	0.0300	0.50	0.11
OCT 24,83	OCT 23,83	1055.0	8.0	4.74	5.00	0.0286	0.55	0.11
OCT 26,83	OCT 25,83	111.0	22.8	******	4.47	0.0564	1.75	0.50
OCT 27,83	OCT 26,83	59.0	******	******	4.79	0.0418	1.55	0.15
NOV 3,83	NOV 2,83	852.0	30.6	3.81	4.22	0.0920	3.05	0.60
NOV 4,83	NOV 3,83	250.0	17.1	4.10	4.55	0.0522	1.90	0.21
NOV 5,83	NOV 4,83	893.0	6.4	4.55	5.30	0.0244	0.45	0.90
NOV 7,83	NOV 6,83	******	******	******	******	******	******	******
NOV 10,83	NOV 9,83	******	******	******	******	******	******	******
NOV 11,83	NOV 10,83	654.0	D 6.9	4.60	5.06	0.0244	0.60	0.05
NOV 12,83	NOV 11,83	******	******	******	******	******	******	******
NOV 13,83	NOV 12,83	428.0	9.8	4.52	4.83	0.0316	1.00	0.06
NOV 16,83	NOV 15,83	1795.0	6.9	4.70	5.04	0.0240	0.45	0.10
NOV 17,83	NOV 16,83	113.0	16.6	******	4.86	U 0.0346	2.05	0.39
NOV 21,83	NOV 20,83	1266.0	14.5	4.39	4.58	0.0428	1.15	0.25
NOV 29,83	NOV 28,83	715.0	15.0	3.85	4.51	0.0460	1.25	0.25
DEC 3,83	DEC 2,83	******	******	******	******	******	******	******
DEC 5,83	DEC 4,83	368.0	6.0	******	5.27	0.0242	0.50	0.09
DEC 6,83	DEC 5,83	120.0	60.7	******	3.90	0.1490	4.05	1.16
DEC 7,83	DEC 6,83	469.0	47.4	******	4.02	0.1198	4.15	0.87
DEC 10,83	DEC 9,83	278.0	40.7	******	4.06	0.1148	1.95	1.15
DEC 12,83	DEC 11,83	1911.0	9.0	******	4.88	0.0280	0.65	0.08
DEC 15,83	DEC 13,83	1259.0	1.6	******	4.71	0.0334	<W 0.05	<W 0.01
DEC 16,83	DEC 15,83	85.0	******	******	3.94	0.1406	1.75	1.65
DEC 22,83	DEC 21,83	1152.0	7.2	******	4.92	0.0258	0.55	0.08
DEC 23,83	DEC 22,83	697.0	11.3	******	4.76	0.0320	1.35	0.14
DEC 27,83	DEC 26,83	7.0	******	******	******	******	******	******
DEC 28,83	DEC 27,83	4.0	******	******	******	******	******	******
DEC 29,83	DEC 28,83	737.0	8.6	******	5.12	0.0244	0.60	D 0.30

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CHARLESTON LAKE/DAILY/AEROCHEM #11 PAGE : 9

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
OCT 13,83	OCT 12,83	0.04	0.14	0.005	<T 0.005	0.105	0.016	G 0.0046
OCT 14,83	OCT 13,83	D 0.10	<W 0.01	<T 0.005	0.035	<T 0.005	D 0.048	0.0112
OCT 24,83	OCT 23,83	0.05	<T 0.01	<W 0.005	<T 0.010	0.035	0.074	0.0100
OCT 26,83	OCT 25,83	0.39	0.29	0.075	0.020	0.175	0.102	0.0339
OCT 27,83	OCT 26,83	******	******	******	******	******	******	0.0162
NOV 3,83	NOV 2,83	0.18	<T 0.02	0.040	0.025	0.055	0.400	0.0603
NOV 4,83	NOV 3,83	0.16	<W 0.01	0.015	<T 0.015	0.030	0.122	0.0282
NOV 5,83	NOV 4,83	0.16	<W 0.01	0.040	<T 0.005	0.035	0.032	0.0050
NOV 7,83	NOV 6,83	******	******	******	******	******	******	******
NOV 10,83	NOV 9,83	******	******	******	******	******	******	******
NOV 11,83	NOV 10,83	0.08	0.07	0.010	<T 0.010	0.025	0.014	0.0087
NOV 12,83	NOV 11,83	******	******	******	******	******	******	******
NOV 13,83	NOV 12,83	0.12	0.10	0.010	0.035	0.055	0.026	0.0148
NOV 16,83	NOV 15,83	0.06	0.06	0.005	<W 0.005	0.020	0.046	0.0091
NOV 17,83	NOV 16,83	0.13	0.15	0.015	0.025	0.065	0.590	0.0138
NOV 21,83	NOV 20,83	D 0.03	0.09	D 0.005	0.020	0.030	0.150	0.0263
NOV 29,83	NOV 28,83	0.06	0.04	0.005	<T 0.015	0.025	0.070	0.0309
DEC 3,83	DEC 2,83	******	******	******	******	******	******	******
DEC 5,83	DEC 4,83	0.10	0.05	0.010	<T 0.005	0.060	0.038	0.0054
DEC 6,83	DEC 5,83	0.12	0.12	0.010	<T 0.015	0.045	0.324	0.1259
DEC 7,83	DEC 6,83	0.09	0.11	0.005	<T 0.010	0.025	0.290	0.0955
DEC 10,83	DEC 9,83	0.07	0.28	0.010	<T 0.010	0.050	0.450	0.0871
DEC 12,83	DEC 11,83	0.05	0.11	0.005	<W 0.005	0.045	0.008	0.0132
DEC 15,83	DEC 13,83	<W 0.01	<W 0.01	0.005	<T 0.005	0.020	0.036	0.0195
DEC 16,83	DEC 15,83	******	0.25	******	******	******	******	0.1148
DEC 22,83	DEC 21,83	<T 0.01	0.03	<T 0.005	<W 0.005	<T 0.010	0.014	0.0120
DEC 23,83	DEC 22,83	0.07	0.05	0.030	<W 0.005	0.175	0.026	0.0174
DEC 27,83	DEC 26,83	******	******	******	******	******	******	******
DEC 28,83	DEC 27,83	******	******	******	******	******	******	******
DEC 29,83	DEC 28,83	0.31	0.06	0.030	0.030	0.050	0.068	0.0076

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAILTON/DAILY/AEROCHEM #10 PAGE : 1

REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR.	SAMPLING START/END HR.	PRECIP START/END HR.	PRECIP START/END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES		SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
JAN 7,83	JAN 6,83	800	800	2100	800	3	4.1	2	23919	2	1		21		N
JAN 8,83	JAN 7,83	800	800	800	2100	1	****	2	23921	2	1		****		
JAN 11,83	JAN 10,83	800	800	1000	800	1	34.1	2	23923	2	1		20		N
JAN 12,83	JAN 11,83	800	800	800	800	3	1.8	2	23925	2	1		****	EF	
JAN 15,83	JAN 14,83	800	800	1900	630	2	3.9	2	23927	2	1		****	EF	
JAN 24,83	JAN 23,83	800	800	1200	800	2	7.0	2	23929	2	1		****	EF	
JAN 26,83	JAN 25,83	800	800	830	1900	3	1.3	2	23932	2	1		****	FE	
JAN 31,83	JAN 30,83	800	800	1730	500	3	5.7	2	23934	2	1		****	EF	
FEB 3,83	FEB 2,83	800	800	830	200	1	42.5	2	23935	2	1		****	EF	
FEB 7,83	FEB 6,83	800	800	2000	600	2	9.3	2	23937	2	1		****	EF	
MAR 3,83	MAR 2,83	800	800	1630	2030	1	0.2	2	23939	2	1	U	234	P	N
MAR 4,83	MAR 3,83	800	800	100	500	2	1.1	2	23941	2	1		****	EF	
MAR 5,83	MAR 4,83	800	800	1600	1930	1	2.5	2	23943	2	1		16		N
MAR 7,83	MAR 6,83	800	800	****	****	1	****	2	23945	2	1		****	G	
MAR 9,83	MAR 8,83	800	800	1430	2300	1	4.7	2	23948	2	1		92		C
MAR 10,83	MAR 9,83	800	800	200	530	1	2.3	2	23950	2	1		118		
MAR 11,83	MAR 10,83	800	800	1800	800	3	2.2	2	23952	2	1		24		N
MAR 20,83	MAR 18,83	800	800	****	****	1	16.6	2	23954	2	1		110		JY2
MAR 22,83	MAR 21,83	800	800	****	****	2	14.4	2	23956	2	1		****	EF	
MAR 28,83	MAR 27,83	800	800	****	****	2	30.3	2	23958	2	1		****	EF	
APR 3,83	APR 2,83	800	800	100	630	2	9.7	2	23959	2	1	U	73	J	H
APR 4,83	APR 3,83	800	800	800	800	1	2.3	2	23961	2	1		100		
APR 8,83	APR 7,83	800	800	830	1500	1	6.3	2	23963	2	1		104		
APR 10,83	APR 9,83	800	800	2000	800	1	****	2	23965	2	1		****		CM
APR 11,83	APR 10,83	800	800	800	2400	1	4.4	2	23967	2	1		96		
APR 15,83	APR 14,83	800	800	200	800	1	7.7	2	23969	2	1		109		
APR 16,83	APR 15,83	800	800	2000	430	1	7.7	2	23971	2	1		54		
APR 20,83	APR 19,83	800	800	****	****	2	3.8	2	23974	2	1		****	EF	
APR 21,83	APR 20,83	800	800	1500	2000	2	9.4	2	23975	2	1		65		
APR 25,83	APR 24,83	800	800	1330	2300	1	1.2	2	23977	2	1		171		N
APR 26,83	APR 25,83	800	800	830	2300	3	9.9	2	23979	2	1		71		
APR 29,83	APR 28,83	800	800	1930	2130	1	0.3	2	23981	2	1	U	265	P	N
MAY 1,83	APR 30,83	800	800	1230	1830	1	13.1	2	23983	2	1		116		
MAY 2,83	MAY 1,83	800	800	200	800	1	18.6	2	23985	2	1		106		
MAY 3,83	MAY 2,83	800	800	1800	2200	1	8.6	2	23987	2	1		101	A	
MAY 4,83	MAY 3,83	800	800	1900	100	1	7.8	2	23989	2	1		103		
MAY 5,83	MAY 4,83	800	800	900	1100	1	1.5	2	23991	2	1		106		
MAY 9,83	MAY 7,83	800	800	****	****	1	22.1	2	23994	2	1		105		Y2
MAY 15,83	MAY 14,83	800	800	100	300	1	5.6	1	23996	2	1		106		
MAY 20,83	MAY 19,83	800	800	1600	200	1	17.4	1	23997	2	1		95		

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAILTON/DAILY/AEROCHEM #10 PAGE : 2

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
JAN 7,83	JAN 6,83	56.0	******	******	3.69	0.2500	9.95	2.10
JAN 8,83	JAN 7,83	200.0	52.0	4.10	4.10	0.1286	4.65	1.04
JAN 11,83	JAN 10,83	450.0	11.9	4.66	4.59	0.0472	0.75	0.16
JAN 12,83	JAN 11,83	******	******	******	******	******	******	******
JAN 15,83	JAN 14,83	******	******	******	******	******	******	******
JAN 24,83	JAN 23,83	******	******	******	******	******	******	******
JAN 26,83	JAN 25,83	******	******	******	******	******	******	******
JAN 31,83	JAN 30,83	******	******	******	******	******	******	******
FEB 3,83	FEB 2,83	******	******	******	******	******	******	******
FEB 7,83	FEB 6,83	******	******	******	******	******	******	******
MAR 3,83	MAR 2,83	30.0	******	******	4.47	0.0576	3.60	0.36
MAR 4,83	MAR 3,83	******	******	******	******	******	******	******
MAR 5,83	MAR 4,83	27.0	******	******	4.47	0.0698	3.85	0.83
MAR 7,83	MAR 6,83	57.0	******	******	3.99	0.1256	6.40	0.60
MAR 9,83	MAR 8,83	280.0	21.0	4.40	4.62	0.0534	1.35	0.39
MAR 10,83	MAR 9,83	175.0	43.2	4.01	4.06	******	2.80	0.72
MAR 11,83	MAR 10,83	35.0	******	******	******	******	2.70	0.42
MAR 20,83	MAR 18,83	1173.0	10.2	4.45	4.97	0.0326	0.90	0.22
MAR 22,83	MAR 21,83	******	******	******	******	******	******	******
MAR 28,83	MAR 27,83	******	******	******	******	******	******	******
APR 3,83	APR 2,83	457.0	13.6	4.41	4.89	0.0334	1.30	0.31
APR 4,83	APR 3,83	148.0	31.5	******	******	******	5.15	1.14
APR 8,83	APR 7,83	422.0	G 105.0	3.59	3.69	0.2420	8.70	1.57
APR 10,83	APR 9,83	1371.0	8.8	4.70	5.20	0.0208	0.55	0.09
APR 11,83	APR 10,83	273.0	20.5	4.26	4.61	0.0444	D 2.25	0.29
APR 15,83	APR 14,83	542.0	******	3.87	4.09	0.1066	4.75	0.82
APR 16,83	APR 15,83	271.0	50.0	3.90	4.02	0.2340	3.25	1.01
APR 20,83	APR 19,83	******	******	******	******	******	******	******
APR 21,83	APR 20,83	394.0	11.5	4.83	4.76	0.0330	1.25	0.05
APR 25,83	APR 24,83	132.0	******	******	4.43	0.0652	5.60	D 0.65
APR 26,83	APR 25,83	453.0	3.8	G 5.22	5.30	0.0246	0.30	0.04
APR 29,83	APR 28,83	51.0	******	******	3.65	G 0.3380	G 23.50	3.70
MAY 1,83	APR 30,83	975.0	39.4	4.21	4.16	0.1148	3.95	0.41
MAY 2,83	MAY 1,83	1272.0	32.3	4.38	4.33	0.0748	3.40	0.37
MAY 3,83	MAY 2,83	562.0	24.0	4.49	4.45	0.0576	2.55	0.32
MAY 4,83	MAY 3,83	516.0	32.6	4.43	D 4.30	0.0776	3.25	0.44
MAY 5,83	MAY 4,83	102.0	******	******	4.42	0.0662	3.75	0.65
MAY 9,83	MAY 7,83	1491.0	37.6	4.42	4.24	0.0872	4.00	0.61
MAY 15,83	MAY 14,83	382.0	37.7	4.30	4.20	0.0944	3.65	0.37
MAY 20,83	MAY 19,83	1066.0	27.9	4.46	4.36	0.0722	2.50	0.34

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAILTON/DAILY/AEROCHEM #10 PAGE : 3

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
JAN 7,83	JAN 6,83	******	0.54	******	******	******	******	0.2042
JAN 8,83	JAN 7,83	0.12	0.27	0.050	0.050	0.075	1.000	0.0794
JAN 11,83	JAN 10,83	<T 0.02	0.12	0.005	<T 0.010	0.070	0.054	0.0257
JAN 12,83	JAN 11,83	******	******	******	******	******	******	******
JAN 15,83	JAN 14,83	******	******	******	******	******	******	******
JAN 24,83	JAN 23,83	******	******	******	******	******	******	******
JAN 26,83	JAN 25,83	******	******	******	******	******	******	******
JAN 31,83	JAN 30,83	******	******	******	******	******	******	******
FEB 3,83	FEB 2,83	******	******	******	******	******	******	******
FEB 7,83	FEB 6,83	******	******	******	******	******	******	******
MAR 3,83	MAR 2,83	******	0.35	******	******	******	******	0.0339
MAR 4,83	MAR 3,83	******	******	******	******	******	******	******
MAR 5,83	MAR 4,83	******	0.86	******	******	******	******	0.0339
MAR 7,83	MAR 6,83	******	0.32	******	******	******	******	0.1023
MAR 9,83	MAR 8,83	0.11	0.08	0.020	0.020	0.040	0.202	0.0240
MAR 10,83	MAR 9,83	0.06	0.09	0.010	<T 0.005	0.025	0.250	0.0871
MAR 11,83	MAR 10,83	******	******	******	******	******	******	******
MAR 20,83	MAR 18,83	0.07	0.14	0.015	0.015	0.085	0.196	0.0107
MAR 22,83	MAR 21,83	******	******	******	******	******	******	******
MAR 28,83	MAR 27,83	******	******	******	******	******	******	******
APR 3,83	APR 2,83	0.17	0.07	0.020	0.010	0.030	0.248	0.0129
APR 4,83	APR 3,83	0.40	0.34	0.060	0.055	0.140	0.670	******
APR 8,83	APR 7,83	0.26	0.21	0.020	0.040	0.030	0.880	0.2042
APR 10,83	APR 9,83	0.06	0.05	0.010	0.030	0.020	0.054	0.0063
APR 11,83	APR 10,83	0.09	0.09	0.010	D 0.040	0.050	0.366	0.0245
APR 15,83	APR 14,83	0.58	0.52	0.090	0.050	0.290	0.430	0.0813
APR 16,83	APR 15,83	0.33	0.21	0.030	0.030	0.020	0.232	0.0955
APR 20,83	APR 19,83	******	******	******	******	******	******	******
APR 21,83	APR 20,83	0.09	0.04	0.020	0.020	0.020	0.076	0.0174
APR 25,83	APR 24,83	B 1.33	D 0.20	B 0.120	0.060	0.070	D 0.880	0.0372
APR 26,83	APR 25,83	0.05	<T 0.01	0.015	0.015	<W 0.005	0.042	0.0050
APR 29,83	APR 28,83	******	0.94	******	******	******	******	0.2239
MAY 1,83	APR 30,83	0.17	0.12	0.025	0.045	0.040	0.352	0.0692
MAY 2,83	MAY 1,83	0.14	D 0.07	0.030	0.045	0.100	0.560	0.0468
MAY 3,83	MAY 2,83	0.36	0.05	0.060	0.040	0.055	0.268	0.0355
MAY 4,83	MAY 3,83	0.33	0.05	0.030	0.045	0.055	0.440	D 0.0501
MAY 5,83	MAY 4,83	0.51	0.10	0.075	0.080	0.075	0.880	0.0380
MAY 9,83	MAY 7,83	0.65	0.16	0.065	0.055	0.050	0.550	0.0575
MAY 15,83	MAY 14,83	0.18	0.12	0.020	0.030	0.030	D 0.350	0.0631
MAY 20,83	MAY 19,83	0.15	0.15	0.025	0.025	0.060	0.340	0.0437

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAILTON/DAILY/AEROCHEM #10 PAGE : 4

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICIENCY (%)		COMMENTS FIELD	COMMENTS OFFICE
MAY 23,83	MAY 22,83	800	800	1500	2300	1	7.3	1	23999	2	1	99			
MAY 26,83	MAY 25,83	800	800	****	****	1	5.0	1	91001	2	1	129			N
MAY 30,83	MAY 29,83	800	800	400	745	1	7.0	1	91003	2	1	103			
MAY 31,83	MAY 30,83	800	800	1900	2300	1	2.5	1	91005	2	1	87			
JUN 7,83	JUN 6,83	800	800	1000	1600	1	4.6	1	91007	2	1	68			
JUN 27,83	JUN 26,83	800	800	2300	300	1	18.0	1	91010	2	1	104			
JUL 22,83	JUL 21,83	800	800	1300	1730	1	11.8	1	91012	2	1	98		C	
JUL 29,83	JUL 28,83	800	800	1800	2200	1	1.4	1	91014	2	1	3		E	N
JUL 30,83	JUL 29,83	800	800	100	300	1	9.0	1	91016	2	1	97			
AUG 1,83	JUL 31,83	800	800	900	1100	1	27.6	1	91018	2	1	99			
AUG 7,83	AUG 6,83	800	800	2100	2300	1	9.0	1	91020	2	1	97			H
AUG 12,83	AUG 11,83	800	800	2000	2300	1	2.4	1	91022	2	1	6		E	N
AUG 18,83	AUG 17,83	800	800	300	430	1	4.7	1	91024	2	1	96			HCM
AUG 23,83	AUG 22,83	800	800	815	1200	1	17.8	1	91026	2	1	92			
AUG 30,83	AUG 29,83	800	800	****	****	1	0.2	1	91027	2	1	****		E	
SEP 10,83	SEP 9,83	800	800	200	400	1	1.1	1	91029	2	1	99			
SEP 17,83	SEP 16,83	800	800	1400	2400	1	15.5	1	91030	2	1	80			
SEP 19,83	SEP 17,83	800	800	****	****	1	8.4	1	91031	2	1	91		Q	Z
SEP 22,83	SEP 21,83	800	800	1030	1600	1	31.0	1	91033	2	1	99			
SEP 26,83	SEP 25,83	800	800	400	700	1	1.2	1	91037	2	1	1		E	N
OCT 4,83	OCT 3,83	800	800	100	200	1	0.8	1	91039	2	1	17			N
OCT 5,83	OCT 4,83	800	800	900	1600	1	18.6	1	91041	2	1	98			
OCT 6,83	OCT 5,83	800	800	1100	2100	1	21.3	1	91043	2	1	98			M
OCT 9,83	OCT 8,83	800	800	900	1600	1	8.0	1	91045	2	1	60			
OCT 13,83	OCT 12,83	800	800	900	2100	1	17.7	1	91047	2	1	93			JHCM
OCT 14,83	OCT 13,83	800	800	2100	100	1	16.4	1	91051	2	1	97			
OCT 15,83	OCT 14,83	800	800	1030	1430	1	3.0	1	91053	2	1	65			
OCT 24,83	OCT 23,83	800	800	830	2100	1	19.8	1	91055	2	1	98			
OCT 26,83	OCT 25,83	800	800	200	400	1	1.9	1	91057	2	1	4			N
OCT 27,83	OCT 26,83	800	800	1700	2000	1	1.1	1	91059	2	1	1		E	N
NOV 3,83	NOV 2,83	800	800	1900	800	1	19.6	1	91061	2	1	88			JHM
NOV 6,83	NOV 4,83	800	800	****	****	3	12.6	1	91066	2	1	57			Y2
NOV 16,83	NOV 15,83	800	800	1400	800	3	****	1	91068	2	1	****			
NOV 17,83	NOV 16,83	800	800	800	2200	2	****	1	91072	2	1	****			
NOV 21,83	NOV 20,83	800	800	1930	100	1	16.0	1	91074	2	1	100			J
NOV 24,83	NOV 23,83	800	800	1900	2300	1	0.8	2	91076	2	1	97			
NOV 28,83	NOV 27,83	800	800	1900	200	3	11.2	2	91078	2	1	94			J
DEC 5,83	DEC 4,83	800	800	900	2100	2	15.6	2	91080	2	1	32			NCM
DEC 6,83	DEC 5,83	800	800	1000	800	1	11.6	2	91082	2	1	U	12	FI	NM
DEC 7,83	DEC 6,83	800	800	800	200	3	14.2	2	91084	2	1		70		

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAILTON/DAILY/AEROCHEM #10 PAGE : 5

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
MAY 23,83	MAY 22,83	467.0	23.2	4.54	4.53	0.1250	2.55	0.30
MAY 26,83	MAY 25,83	415.0	53.0	4.14	4.05	0.1282	4.10	0.99
MAY 30,83	MAY 29,83	463.0	36.8	4.25	4.23	0.0880	4.35	0.45
MAY 31,83	MAY 30,83	141.0	35.3	******	4.33	0.0790	3.60	0.73
JUN 7,83	JUN 6,83	201.0	50.5	4.11	4.07	0.1216	5.40	0.43
JUN 27,83	JUN 26,83	1210.0	65.5	3.97	3.98	0.1522	7.30	0.89
JUL 22,83	JUL 21,83	743.0	13.9	G 6.33	G 6.78	0.0220	1.80	0.38
JUL 29,83	JUL 28,83	3.0	******	******	******	******	******	******
JUL 30,83	JUL 29,83	563.0	16.3	4.55	4.77	0.0454	1.75	0.26
AUG 1,83	JUL 31,83	1763.0	35.5	4.20	4.33	0.0892	3.70	0.30
AUG 7,83	AUG 6,83	560.0	12.0	4.73	4.89	0.0364	1.10	0.12
AUG 12,83	AUG 11,83	10.0	******	******	******	******	******	******
AUG 18,83	AUG 17,83	290.0	G 235.0	3.35	3.54	G 0.5480	G 23.30	2.40
AUG 23,83	AUG 22,83	1051.0	23.5	4.27	4.42	0.0648	2.40	0.13
AUG 30,83	AUG 29,83	******	******	******	******	******	******	******
SEP 10,83	SEP 9,83	70.0	******	******	******	******	1.10	0.48
SEP 17,83	SEP 16,83	799.0	56.8	3.89	4.06	0.0964	4.15	0.96
SEP 19,83	SEP 17,83	492.0	******	******	******	******	******	******
SEP 22,83	SEP 21,83	1971.0	23.3	4.25	4.48	0.0370	2.35	0.20
SEP 26,83	SEP 25,83	1.0	******	******	******	******	******	******
OCT 4,83	OCT 3,83	9.0	******	******	******	******	******	******
OCT 5,83	OCT 4,83	1174.0	39.5	4.03	4.14	0.1050	4.45	0.62
OCT 6,83	OCT 5,83	1345.0	10.7	4.56	4.78	0.0374	1.00	0.10
OCT 9,83	OCT 8,83	310.0	24.6	4.29	4.38	0.0624	2.90	0.39
OCT 13,83	OCT 12,83	1063.0	3.0	G 5.33	G 6.90	0.0140	0.10	0.06
OCT 14,83	OCT 13,83	1023.0	7.0	4.72	4.84	0.0312	0.80	0.17
OCT 15,83	OCT 14,83	126.0	12.5	******	5.00	0.0308	1.65	0.23
OCT 24,83	OCT 23,83	1254.0	9.5	4.70	4.85	0.0318	0.90	0.13
OCT 26,83	OCT 25,83	5.0	******	******	******	******	******	******
OCT 27,83	OCT 26,83	1.0	******	******	******	******	******	******
NOV 3,83	NOV 2,83	1115.0	20.8	4.11	4.69	0.0530	3.10	0.51
NOV 6,83	NOV 4,83	463.0	10.8	4.47	4.73	0.0352	0.80	0.12
NOV 16,83	NOV 15,83	2619.0	7.5	4.72	5.00	0.0242	0.45	0.10
NOV 17,83	NOV 16,83	174.0	11.9	******	4.66	0.0380	0.60	0.26
NOV 21,83	NOV 20,83	1032.0	20.0	3.82	4.42	0.0540	1.70	0.39
NOV 24,83	NOV 23,83	50.0	******	******	4.29	0.0766	******	******
NOV 28,83	NOV 27,83	675.0	21.7	3.68	4.40	0.0584	1.80	0.41
DEC 5,83	DEC 4,83	328.0	4.5	******	G 5.41	0.0202	0.20	0.10
DEC 6,83	DEC 5,83	93.0	******	******	4.04	0.1148	4.45	0.93
DEC 7,83	DEC 6,83	646.0	45.2	******	4.03	0.1152	3.55	0.76

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAILTON/DAILY/AEROCHEM #10 PAGE : 6

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
MAY 23,83	MAY 22,83	0.20	0.10	0.030	0.040	0.035	0.330	0.0295
MAY 26,83	MAY 25,83	0.47	0.16	0.080	0.040	0.020	0.460	0.0891
MAY 30,83	MAY 29,83	0.19	0.15	0.035	0.035	0.060	0.720	0.0589
MAY 31,83	MAY 30,83	0.79	0.21	0.120	0.075	0.060	0.420	0.0468
JUN 7,83	JUN 6,83	0.20	0.12	0.035	0.030	0.060	0.520	0.0851
JUN 27,83	JUN 26,83	0.51	0.18	0.100	0.075	0.045	0.970	0.1047
JUL 22,83	JUL 21,83	0.87	0.10	0.090	0.125	0.025	0.740	G 0.0002
JUL 29,83	JUL 28,83	******	******	******	******	******	******	******
JUL 30,83	JUL 29,83	0.24	0.04	0.025	0.015	<T 0.005	0.278	0.0170
AUG 1,83	JUL 31,83	0.11	0.07	0.010	<T 0.010	0.015	0.490	0.0468
AUG 7,83	AUG 6,83	0.18	0.05	0.020	0.095	0.140	0.148	0.0129
AUG 12,83	AUG 11,83	******	******	******	******	******	******	******
AUG 18,83	AUG 17,83	1.09	0.52	0.145	0.065	0.055	1.330	0.2884
AUG 23,83	AUG 22,83	0.12	0.04	0.030	0.115	0.105	0.188	0.0380
AUG 30,83	AUG 29,83	******	******	******	******	******	******	******
SEP 10,83	SEP 9,83	1.73	0.48	G 0.205	0.125	0.290	0.296	******
SEP 17,83	SEP 16,83	0.29	0.43	0.060	0.030	0.270	0.540	0.0871
SEP 19,83	SEP 17,83	******	******	******	******	******	******	******
SEP 22,83	SEP 21,83	0.19	0.08	0.010	0.020	0.075	0.236	0.0331
SEP 26,83	SEP 25,83	******	******	******	******	******	******	******
OCT 4,83	OCT 3,83	******	******	******	******	******	******	******
OCT 5,83	OCT 4,83	0.31	0.14	0.045	0.050	<W 0.005	0.610	0.0724
OCT 6,83	OCT 5,83	0.03	0.02	<W 0.005	<T 0.010	<W 0.005	0.060	0.0166
OCT 9,83	OCT 8,83	0.35	0.10	0.020	0.040	<W 0.005	0.380	0.0417
OCT 13,83	OCT 12,83	0.03	0.11	<T 0.005	<T 0.015	<W 0.005	0.052	G 0.0001
OCT 14,83	OCT 13,83	0.06	0.02	<W 0.005	0.040	<W 0.005	0.106	0.0145
OCT 15,83	OCT 14,83	0.42	0.17	0.035	0.045	0.090	0.222	0.0100
OCT 24,83	OCT 23,83	0.13	0.04	D 0.010	<T 0.010	0.035	0.128	0.0141
OCT 26,83	OCT 25,83	******	******	******	******	******	******	******
OCT 27,83	OCT 26,83	******	******	******	******	******	******	******
NOV 3,83	NOV 2,83	D 0.63	0.26	0.080	0.055	0.025	0.346	0.0204
NOV 6,83	NOV 4,83	0.04	0.03	0.005	<W 0.005	<T 0.010	0.050	0.0186
NOV 16,83	NOV 15,83	0.06	0.05	0.005	0.020	0.020	0.054	0.0100
NOV 17,83	NOV 16,83	0.06	0.05	0.005	<T 0.005	<T 0.005	0.044	0.0219
NOV 21,83	NOV 20,83	0.05	0.11	0.010	0.030	0.080	0.248	0.0380
NOV 24,83	NOV 23,83	******	******	******	******	******	******	0.0513
NOV 28,83	NOV 27,83	0.11	0.05	0.010	0.025	0.020	0.188	0.0398
DEC 5,83	DEC 4,83	0.07	0.03	0.005	<T 0.005	0.020	0.020	G 0.0039
DEC 6,83	DEC 5,83	0.40	0.17	0.035	0.060	0.050	0.044	0.0912
DEC 7,83	DEC 6,83	0.11	0.11	0.005	<T 0.015	0.020	0.410	0.0933

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAILTON/DAILY/AEROCHEM #10 PAGE : 7

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
DEC 28,83	DEC 15,83	800	800	****	****	3	36.7	2	91086	2	1	67		HMY13
DEC 29,83	DEC 28,83	800	800	900	2300	2	17.5	2	91088	2	1	70		

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAILTON/DAILY/AEROCHEM #10 PAGE : 8

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD		PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
DEC 28,83	DEC 15,83	1595.0	15.6	******	U	5.80	0.0196	2.70	0.37
DEC 29,83	DEC 28,83	787.0	18.3	******		4.44	0.0600	1.05	0.51

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAILTON/DAILY/AEROCHEM #10 PAGE : 9

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
DEC 28,83	DEC 15,83	0.97	0.75	G 0.320	0.040	0.530	0.820	U 0.0016
DEC 29,83	DEC 28,83	0.11	0.15	0.010	<T 0.010	0.045	0.206	0.0363

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : GRAHAM LAKE/DAILY/AEROCHEM #12 PAGE : 1

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES		SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
JAN 7,83	JAN 6,83	700	700	530	540	2	2.1	2	22726	2	1		5		N
JAN 8,83	JAN 7,83	700	700	1310	1325	1	3.1	2	22727	2	1		48		N
JAN 11,83	JAN 10,83	700	700	2310	2335	1	29.1	2	22728	2	1		96		
JAN 12,83	JAN 11,83	700	700	1000	1010	2	3.3	2	22729	2	1		****	EF	
JAN 16,83	JAN 15,83	700	700	800	1100	2	8.1	2	22730	2	1		****	EF	
JAN 24,83	JAN 23,83	700	700	1200	1700	3	8.7	2	22731	2	1	U	49	FL	
JAN 25,83	JAN 24,83	700	700	1900	1910	1	1.7	2	22732	2	1		65		
JAN 26,83	JAN 25,83	700	700	1830	1833	3	1.3	2	22733	2	1		7		N
JAN 31,83	JAN 30,83	700	700	1700	1730	1	5.9	2	22734	2	1		77		
FEB 1,83	JAN 31,83	700	700	910	920	1	1.9	2	22735	2	1		36		N
FEB 3,83	FEB 2,83	700	700	1400	1430	1	36.1	2	22736	2	1		76		
FEB 4,83	FEB 3,83	700	700	1000	1015	1	4.9	2	22737	2	1		68		
FEB 8,83	FEB 7,83	700	700	1200	1220	2	13.1	2	22738	2	1		****	EF	
FEB 18,83	FEB 17,83	700	700	730	740	1	0.3	2	22739	2	1	U	218	P	NT
MAR 9,83	MAR 8,83	700	700	1700	1720	1	5.3	2	22740	2	1		83		HCM
MAR 10,83	MAR 9,83	700	700	1605	1615	1	1.3	2	22741	2	1		73		
MAR 11,83	MAR 10,83	700	700	****	****	1	4.7	2	22742	2	1		66		H
MAR 12,83	MAR 11,83	700	700	205	720	2	1.7	2	22743	2	1		59		
MAR 15,83	MAR 14,83	700	700	1100	1110	1	0.5	2	22744	2	1		65	E	
MAR 19,83	MAR 18,83	700	700	430	500	1	17.7	2	22745	2	1		114		
MAR 20,83	MAR 19,83	700	700	1510	1520	1	1.7	2	22746	2	1		3	E	N
MAR 22,83	MAR 21,83	700	700	1010	1025	3	12.9	2	22747	2	1		****	EF	
MAR 28,83	MAR 27,83	700	****	2000	2030	2	19.1	2	22748	2	1		****	EG	
MAR 29,83	MAR 28,83	700	700	1710	1900	1	2.5	2	22749	2	1		63		
APR 2,83	APR 1,83	700	700	150	310	2	8.7	2	22750	2	1		94		
APR 4,83	APR 3,83	700	700	300	400	1	4.9	2	22751	2	1		92		
APR 8,83	APR 7,83	700	700	900	925	1	5.3	2	22752	2	1		90		
APR 10,83	APR 9,83	700	700	610	700	1	4.1	2	22753	2	1		101		JHC
APR 11,83	APR 10,83	700	700	1000	1100	1	13.5	2	22754	2	1		78		JHC
APR 12,83	APR 11,83	700	700	700	735	2	0.9	2	22755	2	1		53		
APR 15,83	APR 14,83	700	700	2345	1	1	9.3	2	22756	2	1		101		J
APR 16,83	APR 15,83	700	700	1645	1700	1	17.8	2	22757	2	1		101		
APR 17,83	APR 16,83	700	700	1000	1009	1	1.6	2	22758	2	1		145		N
APR 20,83	APR 19,83	700	700	1830	1900	2	9.0	2	22759	2	1		****	EF	
APR 21,83	APR 20,83	700	700	930	940	2	10.2	2	22760	2	1		57		
APR 22,83	APR 21,83	700	700	1850	1855	2	2.1	2	22761	2	1		73		
APR 25,83	APR 24,83	700	700	1800	1805	1	7.0	2	22762	2	1		100		
APR 26,83	APR 25,83	700	700	1745	1750	1	9.1	2	22763	2	1		87		
APR 29,83	APR 28,83	700	700	2220	2225	1	3.4	2	22764	2	1		131		N
MAY 1,83	APR 30,83	700	700	2020	2030	1	27.0	2	22765	2	1		100		C

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : GRAHAM LAKE/DAILY/AEROCHEM #12

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
JAN 7,83	JAN 6,83	8.0	******	******	******	******	******	******
JAN 8,83	JAN 7,83	97.0	******	******	3.82	0.1762	6.05	1.22
JAN 11,83	JAN 10,83	1794.0	6.1	5.06	4.93	0.0330	0.50	0.10
JAN 12,83	JAN 11,83	******	******	******	******	******	******	******
JAN 16,83	JAN 15,83	******	******	******	******	******	******	******
JAN 24,83	JAN 23,83	276.0	23.0	4.33	4.41	0.0902	2.10	0.45
JAN 25,83	JAN 24,83	71.0	******	******	4.64	0.0546	1.65	0.50
JAN 26,83	JAN 25,83	6.0	******	******	******	******	******	******
JAN 31,83	JAN 30,83	292.0	41.0	4.09	4.13	0.1192	3.20	0.85
FEB 1,83	JAN 31,83	45.0	******	******	5.06	0.0422	5.95	1.10
FEB 3,83	FEB 2,83	1774.0	13.1	4.57	4.52	0.0512	1.05	0.23
FEB 4,83	FEB 3,83	214.0	******	4.24	4.31	0.0748	2.25	0.42
FEB 8,83	FEB 7,83	******	******	******	******	******	******	******
FEB 18,83	FEB 17,83	42.0	******	******	3.31	G 0.4700	4.85	G 5.80
MAR 9,83	MAR 8,83	285.0	9.2	G 5.77	B 6.02	0.0212	1.30	0.18
MAR 10,83	MAR 9,83	61.0	******	******	U 5.87	0.0306	4.10	0.49
MAR 11,83	MAR 10,83	201.0	12.3	4.73	4.77	0.0350	1.00	0.17
MAR 12,83	MAR 11,83	65.0	******	******	4.79	0.0324	0.50	0.11
MAR 15,83	MAR 14,83	21.0	******	******	******	******	******	******
MAR 19,83	MAR 18,83	1300.0	4.8	4.88	5.28	0.0248	0.30	0.09
MAR 20,83	MAR 19,83	4.0	******	******	******	******	******	******
MAR 22,83	MAR 21,83	******	******	******	******	******	******	******
MAR 28,83	MAR 27,83	******	******	******	******	******	******	******
MAR 29,83	MAR 28,83	101.0	19.7	******	4.57	0.0496	1.35	0.43
APR 2,83	APR 1,83	529.0	7.9	4.79	5.07	0.0264	0.65	0.16
APR 4,83	APR 3,83	290.0	35.2	4.04	4.26	0.0838	2.75	0.66
APR 8,83	APR 7,83	306.0	81.5	3.76	3.77	0.2060	7.40	1.27
APR 10,83	APR 9,83	268.0	14.2	5.00	G 5.89	0.0178	1.00	0.13
APR 11,83	APR 10,83	675.0	4.9	G 5.18	G 5.84	0.0162	0.55	0.09
APR 12,83	APR 11,83	31.0	******	******	******	******	5.35	0.62
APR 15,83	APR 14,83	607.0	30.5	U 5.15	4.26	0.0764	2.55	0.48
APR 16,83	APR 15,83	1157.0	23.7	4.26	4.36	0.0652	1.05	0.52
APR 17,83	APR 16,83	149.0	******	******	4.20	0.1874	1.85	1.14
APR 20,83	APR 19,83	******	******	******	******	******	******	******
APR 21,83	APR 20,83	376.0	D 6.6	4.72	4.93	0.0344	0.90	0.03
APR 22,83	APR 21,83	99.0	******	******	4.93	0.0354	0.60	0.13
APR 25,83	APR 24,83	452.0	17.9	4.56	4.51	0.0564	2.00	0.16
APR 26,83	APR 25,83	512.0	5.4	5.01	5.07	0.0284	0.50	0.04
APR 29,83	APR 28,83	286.0	G 95.0	4.05	3.97	0.1666	G 12.00	1.75
MAY 1,83	APR 30,83	1744.0	28.0	4.41	4.56	0.0558	2.95	0.29

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : GRAHAM LAKE/DAILY/AEROCHEM #12

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
JAN 7,83	JAN 6,83	******	******	******	******	******	******	******
JAN 8,83	JAN 7,83	0.28	0.36	0.070	0.080	0.165	0.092	0.1514
JAN 11,83	JAN 10,83	0.03	0.09	0.010	<T 0.010	0.045	0.074	0.0117
JAN 12,83	JAN 11,83	******	******	******	******	******	******	******
JAN 16,83	JAN 15,83	******	******	******	******	******	******	******
JAN 24,83	JAN 23,83	0.08	0.19	0.015	0.045	0.075	0.450	0.0389
JAN 25,83	JAN 24,83	0.17	0.51	0.035	U 0.225	0.325	******	0.0229
JAN 26,83	JAN 25,83	******	******	******	******	******	******	******
JAN 31,83	JAN 30,83	0.17	0.26	0.025	0.115	0.135	0.510	0.0741
FEB 1,83	JAN 31,83	******	0.32	******	******	******	******	0.0087
FEB 3,83	FEB 2,83	0.04	0.13	0.020	0.035	0.040	0.162	0.0302
FEB 4,83	FEB 3,83	0.09	0.30	0.020	0.130	0.140	0.328	0.0490
FEB 8,83	FEB 7,83	******	******	******	******	******	******	******
FEB 18,83	FEB 17,83	******	G 1.32	******	******	******	******	0.4898
MAR 9,83	MAR 8,83	0.10	0.23	0.025	0.060	0.150	0.064	B 0.0010
MAR 10,83	MAR 9,83	******	D 0.38	******	******	******	******	U 0.0013
MAR 11,83	MAR 10,83	0.07	0.57	0.025	G 0.180	0.400	0.216	0.0170
MAR 12,83	MAR 11,83	0.09	0.53	0.030	G 0.190	0.435	******	0.0162
MAR 15,83	MAR 14,83	******	******	******	******	******	******	******
MAR 19,83	MAR 18,83	0.04	0.12	<T 0.005	0.020	0.070	0.102	0.0052
MAR 20,83	MAR 19,83	******	******	******	******	******	******	******
MAR 22,83	MAR 21,83	******	******	******	******	******	******	******
MAR 28,83	MAR 27,83	******	******	******	******	******	******	******
MAR 29,83	MAR 28,83	0.16	0.26	0.025	G 0.140	0.170	******	0.0269
APR 2,83	APR 1,83	0.12	0.06	0.020	0.020	0.030	0.144	0.0085
APR 4,83	APR 3,83	0.23	0.32	0.040	0.095	0.180	0.400	0.0550
APR 8,83	APR 7,83	0.19	0.17	0.030	0.060	D 0.110	0.760	0.1698
APR 10,83	APR 9,83	0.12	0.08	0.020	0.050	0.050	D 0.292	G 0.0013
APR 11,83	APR 10,83	0.12	0.06	0.010	0.030	0.040	0.132	G 0.0014
APR 12,83	APR 11,83	******	0.14	******	******	******	******	******
APR 15,83	APR 14,83	0.24	0.28	0.030	0.030	0.120	0.132	0.0550
APR 16,83	APR 15,83	0.06	0.09	0.005	0.030	0.020	0.072	0.0437
APR 17,83	APR 16,83	0.23	0.48	0.030	G 0.160	0.240	0.350	0.0631
APR 20,83	APR 19,83	******	******	******	******	******	******	******
APR 21,83	APR 20,83	0.06	<T 0.01	0.025	0.020	0.025	0.024	0.0117
APR 22,83	APR 21,83	0.11	0.04	0.035	0.055	0.040	<T 0.004	0.0117
APR 25,83	APR 24,83	0.05	0.03	0.020	0.020	<W 0.005	0.176	0.0309
APR 26,83	APR 25,83	0.03	0.03	0.020	0.020	0.010	0.036	0.0085
APR 29,83	APR 28,83	G 1.71	0.40	G 0.300	0.125	0.150	G 2.180	0.1072
MAY 1,83	APR 30,83	0.14	0.10	0.025	0.070	0.065	0.550	0.0275

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : GRAHAM LAKE/DAILY/AEROCHEM #12

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES		SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
MAY 2,83	MAY 1,83	700	700	410	415	1	3.2	2	22766	2	1		42		N
MAY 3,83	MAY 2,83	700	700	1910	1920	1	18.8	2	22767	2	1		112		
MAY 4,83	MAY 3,83	700	700	2135	2145	1	4.4	2	22768	2	1		104		
MAY 5,83	MAY 4,83	700	700	1910	915	1	****	*	22769	2	1		****		
MAY 8,83	MAY 7,83	700	700	515	520	1	11.0	2	22770	2	1		101		
MAY 9,83	MAY 8,83	700	700	1510	1535	1	4.6	2	22771	2	1		112		
MAY 10,83	MAY 9,83	700	700	610	640	1	1.6	2	22772	2	1		66		
MAY 11,83	MAY 10,83	700	700	920	930	1	3.6	2	22773	2	1		112		
MAY 15,83	MAY 14,83	700	700	300	340	1	3.8	2	22774	2	1		115		
MAY 20,83	MAY 19,83	700	700	335	400	1	11.4	1	22775	2	1		96		
MAY 23,83	MAY 22,83	700	700	2105	2110	1	5.0	1	22776	2	1		95		
MAY 26,83	MAY 25,83	700	700	50	100	1	10.0	1	22777	2	1		****	EF	
MAY 30,83	MAY 29,83	700	700	2310	2315	1	11.2	1	22778	2	1		92		J
MAY 31,83	MAY 30,83	700	700	1000	1005	1	3.0	1	22779	2	1		74		HM
JUN 6,83	JUN 5,83	700	700	600	645	1	1.2	1	22780	2	1		57		
JUN 7,83	JUN 6,83	700	700	1250	1255	1	5.0	1	22781	2	1		91		
JUN 25,83	JUN 24,83	700	700	2110	2115	1	5.8	1	22783	2	1		90	CD	J
JUN 27,83	JUN 26,83	700	700	5	15	1	18.6	1	22784	2	1		98		HM
JUL 1,83	JUN 30,83	700	700	1005	1020	1	10.0	1	22785	2	1	U	70	EG	
JUL 4,83	JUL 3,83	700	700	2000	2010	1	1.1	1	22786	2	1		60		
JUL 5,83	JUL 4,83	700	700	800	810	1	0.6	1	22787	2	1		51		
JUL 22,83	JUL 21,83	700	700	2140	2155	1	8.0	1	22788	2	1		100		H
JUL 30,83	JUL 29,83	700	700	200	220	1	14.0	1	22789	2	1		108		
AUG 1,83	JUL 31,83	700	700	645	700	1	25.2	1	22790	2	1		111		M
AUG 6,83	AUG 5,83	700	700	2150	2200	1	2.1	1	22792	2	1		93		
AUG 9,83	AUG 8,83	700	700	1700	1720	1	23.2	1	22793	2	1		112		
AUG 12,83	AUG 11,83	700	700	1610	1625	1	3.2	1	22794	2	1		72		H
AUG 19,83	AUG 18,83	700	700	1715	1725	1	0.8	1	22795	2	1		38		N
AUG 22,83	AUG 21,83	700	700	710	718	1	12.0	1	22796	2	1		79		J
AUG 29,83	AUG 28,83	700	700	1700	1710	1	8.0	1	22797	2	1		104		
AUG 31,83	AUG 30,83	700	700	1705	1735	1	24.2	1	22798	2	1		104		J
SEP 10,83	SEP 9,83	700	700	1705	1710	1	1.0	1	22799	2	1	U	274	P	N
SEP 17,83	SEP 16,83	700	700	2200	2215	1	3.8	1	22801	2	1		90		
SEP 18,83	SEP 17,83	700	700	1500	1520	1	10.0	1	22802	2	1		107		
SEP 19,83	SEP 18,83	700	700	1700	1710	1	0.6	1	22803	2	1		137		N
SEP 22,83	SEP 21,83	700	700	1100	1120	1	28.1	1	22804	2	1		106		C
SEP 24,83	SEP 23,83	700	700	1500	1515	1	2.8	1	22805	2	1		70		M
SEP 26,83	SEP 25,83	700	700	415	420	1	1.8	1	22806	2	1		29		N
OCT 4,83	OCT 3,83	700	700	110	115	1	1.4	1	22807	2	1		66		
OCT 5,83	OCT 4,83	700	700	2230	2305	1	18.0	1	22808	2	1		105		

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : GRAHAM LAKE/DAILY/AEROCHEM #12

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
MAY 2,83	MAY 1,83	88.0	******	******	4.39	0.0684	3.15	0.31
MAY 3,83	MAY 2,83	1358.0	******	4.68	4.57	0.0532	******	******
MAY 4,83	MAY 3,83	296.0	******	4.19	4.12	0.1206	******	******
MAY 5,83	MAY 4,83	31.0	******	******	4.47	0.0788	******	******
MAY 8,83	MAY 7,83	714.0	31.4	4.36	4.38	0.2060	3.30	0.48
MAY 9,83	MAY 8,83	331.0	14.4	4.64	4.71	0.0504	1.50	0.12
MAY 10,83	MAY 9,83	68.0	******	******	G 6.21	0.0160	0.50	0.10
MAY 11,83	MAY 10,83	260.0	5.6	5.04	G 5.23	0.0276	0.50	0.10
MAY 15,83	MAY 14,83	282.0	27.7	4.44	4.37	0.0702	2.50	0.33
MAY 20,83	MAY 19,83	705.0	27.4	4.43	4.35	0.0718	2.25	0.31
MAY 23,83	MAY 22,83	305.0	24.6	4.58	4.62	0.0526	2.85	0.47
MAY 26,83	MAY 25,83	******	******	******	******	******	******	******
MAY 30,83	MAY 29,83	663.0	D 130.0	U 6.33	U 5.67	0.1152	6.25	D 0.95
MAY 31,83	MAY 30,83	143.0	******	******	4.12	0.1206	3.75	0.59
JUN 6,83	JUN 5,83	44.0	******	******	4.33	0.0892	> 10.00	******
JUN 7,83	JUN 6,83	294.0	154.0	U 5.35	U 5.51	0.1592	5.45	0.61
JUN 25,83	JUN 24,83	335.0	25.5	U 6.49	U 7.44	0.0174	3.65	0.55
JUN 27,83	JUN 26,83	1175.0	61.5	3.95	4.05	0.1382	7.35	0.80
JUL 1,83	JUN 30,83	452.0	******	******	******	******	******	******
JUL 4,83	JUL 3,83	43.0	******	******	U 7.22	0.0336	11.20	1.07
JUL 5,83	JUL 4,83	20.0	******	******	U 7.40	0.0184	******	******
JUL 22,83	JUL 21,83	515.0	25.0	G 5.12	G 5.32	0.0340	4.35	0.75
JUL 30,83	JUL 29,83	974.0	30.4	4.36	4.46	0.0728	3.45	0.17
AUG 1,83	JUL 31,83	1804.0	41.3	4.16	4.23	0.1032	3.95	0.46
AUG 6,83	AUG 5,83	126.0	14.4	******	G 6.26	0.0214	1.95	0.46
AUG 9,83	AUG 8,83	1666.0	16.3	4.85	5.04	0.0354	2.45	0.32
AUG 12,83	AUG 11,83	148.0	15.8	******	4.89	0.0412	2.20	0.20
AUG 19,83	AUG 18,83	20.0	******	******	4.53	******	******	******
AUG 22,83	AUG 21,83	612.0	21.2	U 6.06	U 7.26	0.0178	3.55	0.50
AUG 29,83	AUG 28,83	536.0	22.5	4.26	4.46	0.0658	2.60	0.18
AUG 31,83	AUG 30,83	1620.0	5.7	G 5.27	U 6.69	0.0186	0.65	0.11
SEP 10,83	SEP 9,83	176.0	61.5	******	4.12	0.1216	7.00	1.22
SEP 17,83	SEP 16,83	221.0	50.5	D 3.71	******	******	3.55	0.88
SEP 18,83	SEP 17,83	691.0	38.4	3.93	4.26	0.0608	3.40	0.52
SEP 19,83	SEP 18,83	53.0	******	******	******	******	7.40	1.37
SEP 22,83	SEP 21,83	1920.0	12.7	4.09	4.45	0.0578	1.95	0.21
SEP 24,83	SEP 23,83	126.0	8.3	******	U 6.87	0.0194	1.00	0.36
SEP 26,83	SEP 25,83	34.0	******	******	4.02	0.1404	4.95	1.06
OCT 4,83	OCT 3,83	60.0	******	******	4.34	0.0688	3.75	0.55
OCT 5,83	OCT 4,83	1220.0	40.0	3.96	4.15	0.1042	5.30	0.70

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : GRAHAM LAKE/DAILY/AEROCHEM #12

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
MAY 2,83	MAY 1,83	0.26	0.10	0.050	0.055	0.070	******	0.0407
MAY 3,83	MAY 2,83	******	******	******	******	******	******	0.0269
MAY 4,83	MAY 3,83	******	******	******	******	******	******	0.0759
MAY 5,83	MAY 4,83	******	******	******	******	******	******	0.0339
MAY 8,83	MAY 7,83	0.28	0.22	0.060	0.095	0.145	0.590	0.0417
MAY 9,83	MAY 8,83	0.18	0.21	0.035	0.095	0.155	0.110	0.0195
MAY 10,83	MAY 9,83	0.29	0.18	0.055	0.110	0.170	******	G 0.0006
MAY 11,83	MAY 10,83	0.16	0.07	0.030	0.035	0.045	0.062	G 0.0059
MAY 15,83	MAY 14,83	0.25	0.14	0.035	0.055	0.065	0.216	0.0427
MAY 20,83	MAY 19,83	0.11	0.12	0.025	0.030	0.065	0.186	0.0447
MAY 23,83	MAY 22,83	0.53	D 0.28	D 0.095	D 0.175	D 0.240	0.352	0.0240
MAY 26,83	MAY 25,83	******	******	******	******	******	******	******
MAY 30,83	MAY 29,83	******	0.30	******	******	******	U 13.200	U 0.0021
MAY 31,83	MAY 30,83	0.75	0.42	0.120	0.155	0.120	0.870	0.0759
JUN 6,83	JUN 5,83	******	G 1.39	******	******	******	******	0.0468
JUN 7,83	JUN 6,83	******	0.18	******	******	******	U 9.210	U 0.0031
JUN 25,83	JUN 24,83	U 2.41	0.16	U 0.540	U 0.275	0.065	0.440	U 0.0000
JUN 27,83	JUN 26,83	0.57	0.18	0.120	0.045	0.050	D 0.102	0.0891
JUL 1,83	JUN 30,83	******	******	******	******	******	******	******
JUL 4,83	JUL 3,83	******	G 2.45	******	******	******	******	U 0.0001
JUL 5,83	JUL 4,83	******	******	******	******	******	******	U 0.0000
JUL 22,83	JUL 21,83	1.12	0.24	G 0.260	0.100	0.050	0.970	G 0.0048
JUL 30,83	JUL 29,83	0.28	0.26	0.040	0.095	0.160	0.560	0.0347
AUG 1,83	JUL 31,83	0.16	0.18	D 0.020	0.045	0.065	0.324	0.0589
AUG 6,83	AUG 5,83	0.91	0.51	0.135	G 0.270	0.265	0.294	G 0.0005
AUG 9,83	AUG 8,83	0.55	0.19	0.090	0.085	0.055	0.410	0.0091
AUG 12,83	AUG 11,83	0.30	0.26	0.045	0.085	0.150	0.222	0.0129
AUG 19,83	AUG 18,83	******	******	******	******	******	******	0.0295
AUG 22,83	AUG 21,83	U 1.95	0.14	U 0.480	0.055	0.020	0.440	U 0.0001
AUG 29,83	AUG 28,83	0.16	0.04	0.035	0.015	0.015	0.244	0.0347
AUG 31,83	AUG 30,83	0.31	0.04	0.090	0.030	0.015	0.236	U 0.0002
SEP 10,83	SEP 9,83	1.30	0.43	G 0.290	0.175	0.270	0.750	0.0759
SEP 17,83	SEP 16,83	0.23	0.50	0.085	D 0.070	0.305	0.360	******
SEP 18,83	SEP 17,83	0.13	0.10	0.020	0.030	0.035	0.490	0.0550
SEP 19,83	SEP 18,83	******	0.42	******	******	******	******	******
SEP 22,83	SEP 21,83	0.09	0.04	0.010	<T 0.010	<W 0.005	0.170	0.0355
SEP 24,83	SEP 23,83	0.74	0.19	0.040	0.050	<W 0.005	0.400	U 0.0001
SEP 26,83	SEP 25,83	******	0.35	******	******	******	******	0.0955
OCT 4,83	OCT 3,83	******	0.14	******	******	******	0.370	0.0457
OCT 5,83	OCT 4,83	0.39	0.15	0.050	0.050	<W 0.005	0.830	0.0708

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : GRAHAM LAKE/DAILY/AEROCHEM #12

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
OCT 6,83	OCT 5,83	700	700	2000	2030	1	28.4	1	22809	2	1	101		
OCT 9,83	OCT 8,83	700	700	1715	1735	1	10.1	1	22810	2	1	94		
OCT 12,83	OCT 11,83	700	700	****	****	1	2.0	1	22811	2	1	100		
OCT 13,83	OCT 12,83	700	700	1700	1715	1	10.0	1	22812	2	1	100		J
OCT 14,83	OCT 13,83	700	700	2215	2230	1	10.8	1	22813	2	1	105		
OCT 15,83	OCT 14,83	700	700	1015	1020	1	4.8	1	22814	2	1	97		
OCT 24,83	OCT 23,83	700	700	1725	1810	1	17.2	1	22815	2	1	97		
OCT 26,83	OCT 25,83	700	700	610	700	1	1.0	1	22816	2	1	106		
OCT 27,83	OCT 26,83	700	700	920	935	1	6.0	1	22817	2	1	59		JH
OCT 28,83	OCT 27,83	700	700	740	1110	1	1.2	1	22818	2	1	45		N
NOV 3,83	NOV 2,83	700	700	200	215	3	10.6	1	22819	2	1	102		J
NOV 4,83	NOV 3,83	700	700	745	805	3	4.4	1	22820	2	1	145		NJ
NOV 5,83	NOV 4,83	700	700	915	930	2	13.0	1	22821	2	1	51		J
NOV 6,83	NOV 5,83	700	700	900	925	3	2.6	1	22822	2	1	76		
NOV 11,83	NOV 10,83	700	700	2045	2350	1	12.4	1	22823	2	1	93		
NOV 12,83	NOV 11,83	700	700	1200	1215	3	14.0	1	22824	2	1	73		
NOV 16,83	NOV 15,83	700	700	1215	1400	3	28.1	1	22825	2	1	86		JHC
NOV 17,83	NOV 16,83	700	700	1020	1050	3	8.6	1	22826	2	1	44		N
NOV 21,83	NOV 20,83	700	700	2340	2355	1	18.6	1	22827	2	1	100		
NOV 25,83	NOV 24,83	700	700	715	730	2	1.2	2	22829	2	1	146		N
NOV 26,83	NOV 25,83	700	700	1600	1610	3	0.4	2	22830	2	1	****	E	
NOV 29,83	NOV 28,83	700	700	2215	2230	3	14.6	2	22831	2	1	82		J
DEC 1,83	NOV 30,83	700	700	1430	1610	2	1.2	2	22833	2	1	****	EK	
DEC 5,83	DEC 4,83	700	700	1050	2000	2	12.8	2	22834	2	1	****	EF	
DEC 6,83	DEC 5,83	700	700	1000	1900	1	2.4	2	22835	2	1	35		N
DEC 7,83	DEC 6,83	700	700	700	1400	3	26.8	2	22836	2	1	92		
DEC 8,83	DEC 7,83	700	700	820	1400	2	1.0	2	22837	2	1	****	E	
DEC 9,83	DEC 8,83	700	700	****	****	2	1.2	2	22838	2	1	****	E	
DEC 11,83	DEC 10,83	700	700	1500	1900	2	4.8	2	22840	2	1	19		N
DEC 12,83	DEC 11,83	700	700	1900	2200	2	5.8	2	22841	2	1	****	EFK	
DEC 13,83	DEC 12,83	700	700	1100	1210	4	26.0	2	22842	2	1	U 14	FI	
DEC 14,83	DEC 13,83	700	700	700	700	1	19.0	2	22843	2	1	34		NHCM
DEC 15,83	DEC 14,83	700	700	700	1145	1	1.4	2	22844	2	1	81		
DEC 16,83	DEC 15,83	700	700	130	245	2	2.2	2	22845	2	1	76		
DEC 19,83	DEC 18,83	700	700	910	1110	2	0.8	2	22846	2	1	****	EF	
DEC 22,83	DEC 21,83	700	700	930	1200	3	8.8	2	22847	2	1	****	EF	
DEC 23,83	DEC 22,83	700	700	1200	1400	3	17.6	2	22848	2	1	****	EF	
DEC 24,83	DEC 23,83	700	700	1100	1125	2	0.6	2	22849	2	1	****	EF	
DEC 27,83	DEC 26,83	700	700	2200	30	2	2.4	2	22850	2	1	****	EF	
DEC 28,83	DEC 27,83	700	700	800	1900	2	1.4	2	22851	2	1	****	EF	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : GRAHAM LAKE/DAILY/AEROCHEM #12

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM		PH FIELD		PH LAB		TOTAL H+ TO PH8.3 MG/L		SULPHATE MG/L	NITRATE AS N MG/L
OCT 6,83	OCT 5,83	1848.0	17.3		4.34		4.49		0.0538		2.05	0.23
OCT 9,83	OCT 8,83	611.0	20.6		4.31		4.52		0.0532		3.10	0.32
OCT 12,83	OCT 11,83	129.0	15.0		******	U	7.13		0.0194		1.25	0.19
OCT 13,83	OCT 12,83	643.0	4.0	G	5.28	G	6.41		0.0156		0.25	0.09
OCT 14,83	OCT 13,83	728.0	8.0		4.71		4.94		0.0294		0.65	0.14
OCT 15,83	OCT 14,83	299.0	28.8		4.30		4.38		0.0680		2.80	0.67
OCT 24,83	OCT 23,83	1070.0	8.2		4.80		5.09		0.0264		0.75	0.18
OCT 26,83	OCT 25,83	68.0	******		******		******		******		******	******
OCT 27,83	OCT 26,83	230.0	10.2		4.23		5.34		0.0264		1.40	0.24
OCT 28,83	OCT 27,83	35.0	******		******	G	5.22		0.0326		3.20	0.84
NOV 3,83	NOV 2,83	696.0	40.4		3.59		4.22		0.0986		3.55	0.82
NOV 4,83	NOV 3,83	409.0	25.8		3.86		4.42		0.0666		2.40	0.35
NOV 5,83	NOV 4,83	430.0	9.2		4.22		4.86		0.0336		0.55	0.13
NOV 6,83	NOV 5,83	128.0	10.4		******		4.90		0.0348		1.00	0.10
NOV 11,83	NOV 10,83	741.0	10.6		4.32		******		0.0294		0.90	0.11
NOV 12,83	NOV 11,83	662.0	12.3		4.27		4.65		0.0412		1.25	0.03
NOV 16,83	NOV 15,83	1554.0	6.0		4.76	G	5.34	D	0.0200		0.45	0.04
NOV 17,83	NOV 16,83	244.0	11.0		4.33		4.73		0.0382		1.00	0.25
NOV 21,83	NOV 20,83	1204.0	14.0		4.30		4.70		0.0388		1.20	0.25
NOV 25,83	NOV 24,83	113.0	45.3		******		4.11		0.1084		4.40	1.13
NOV 26,83	NOV 25,83	******	******		******		******		******		******	******
NOV 29,83	NOV 28,83	772.0	14.8		3.66		4.67		0.0400		1.35	0.35
DEC 1,83	NOV 30,83	******	******		******		******		******		******	******
DEC 5,83	DEC 4,83	******	******		******		******		******		******	******
DEC 6,83	DEC 5,83	54.0	******		******		3.88		0.1614		5.95	1.57
DEC 7,83	DEC 6,83	1596.0	42.2		******		4.09		0.1046		3.20	0.79
DEC 8,83	DEC 7,83	******	******		******		******		******		******	******
DEC 9,83	DEC 8,83	******	******		******		******		******		******	******
DEC 11,83	DEC 10,83	61.0	******		******		3.87		0.1600		3.55	1.55
DEC 12,83	DEC 11,83	******	******		******		******		******		******	******
DEC 13,83	DEC 12,83	247.0	7.5		******		4.97		0.0256		0.30	0.16
DEC 14,83	DEC 13,83	421.0	7.5		******		5.01		0.0254		0.65	0.07
DEC 15,83	DEC 14,83	73.0	******		******		3.95		0.1328		3.15	1.17
DEC 16,83	DEC 15,83	108.0	43.1		******		4.03		0.1142		1.60	1.26
DEC 19,83	DEC 18,83	******	******		******		******		******		******	******
DEC 22,83	DEC 21,83	******	******		******		******		******		******	******
DEC 23,83	DEC 22,83	******	******		******		******		******		******	******
DEC 24,83	DEC 23,83	******	******		******		******		******		******	******
DEC 27,83	DEC 26,83	******	******		******		******		******		******	******
DEC 28,83	DEC 27,83	******	******		******		******		******		******	******

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : GRAHAM LAKE/DAILY/AEROCHEM #12

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
OCT 6,83	OCT 5,83	0.05	0.04	0.005	0.015	<W 0.005	0.354	0.0324
OCT 9,83	OCT 8,83	0.44	0.12	0.070	0.065	<W 0.005	0.362	0.0302
OCT 12,83	OCT 11,83	0.45	U 1.34	0.150	U 0.230	U 0.770	0.690	U 0.0001
OCT 13,83	OCT 12,83	0.06	0.21	0.020	0.020	0.110	D 0.208	G 0.0004
OCT 14,83	OCT 13,83	0.06	0.02	0.010	<T 0.005	<T 0.010	0.112	0.0115
OCT 15,83	OCT 14,83	0.33	0.13	0.040	0.055	<T 0.010	D 0.580	0.0417
OCT 24,83	OCT 23,83	0.05	0.04	0.005	<T 0.015	0.020	0.260	0.0081
OCT 26,83	OCT 25,83	0.26	******	0.050	0.205	G 0.425	******	******
OCT 27,83	OCT 26,83	0.21	0.06	0.080	0.045	0.045	0.220	0.0046
OCT 28,83	OCT 27,83	******	0.50	******	******	******	******	G 0.0060
NOV 3,83	NOV 2,83	0.24	0.10	0.045	0.050	0.080	0.580	0.0603
NOV 4,83	NOV 3,83	0.05	<W 0.01	0.010	0.020	0.035	0.314	0.0380
NOV 5,83	NOV 4,83	0.04	<W 0.01	0.005	<W 0.005	0.020	0.072	0.0138
NOV 6,83	NOV 5,83	0.11	<T 0.02	0.010	<T 0.005	0.030	0.116	0.0126
NOV 11,83	NOV 10,83	0.05	0.05	0.005	0.020	0.020	0.120	******
NOV 12,83	NOV 11,83	0.02	0.03	<T 0.005	<T 0.010	<T 0.005	0.100	0.0224
NOV 16,83	NOV 15,83	0.04	0.04	0.005	<T 0.005	0.025	0.144	G 0.0046
NOV 17,83	NOV 16,83	0.04	0.05	<T 0.005	<T 0.010	0.020	0.244	0.0186
NOV 21,83	NOV 20,83	0.05	0.08	0.010	0.020	0.030	0.280	0.0200
NOV 25,83	NOV 24,83	G 1.34	0.62	0.080	G 0.180	0.390	0.600	0.0776
NOV 26,83	NOV 25,83	******	******	******	******	******	******	******
NOV 29,83	NOV 28,83	0.05	0.05	0.005	0.020	0.020	0.316	0.0214
DEC 1,83	NOV 30,83	******	******	******	******	******	******	******
DEC 5,83	DEC 4,83	******	******	******	******	******	******	******
DEC 6,83	DEC 5,83	******	0.34	******	******	******	******	0.1318
DEC 7,83	DEC 6,83	0.07	0.07	0.005	<T 0.010	0.015	0.450	0.0813
DEC 8,83	DEC 7,83	******	******	******	******	******	******	******
DEC 9,83	DEC 8,83	******	******	******	******	******	******	******
DEC 11,83	DEC 10,83	******	0.33	******	******	******	******	0.1349
DEC 12,83	DEC 11,83	******	******	******	******	******	******	******
DEC 13,83	DEC 12,83	0.03	<T 0.02	<T 0.005	<W 0.005	0.020	0.020	0.0107
DEC 14,83	DEC 13,83	<W 0.01	0.03	<W 0.005	<T 0.005	0.020	0.032	0.0098
DEC 15,83	DEC 14,83	******	0.27	******	******	******	******	0.1122
DEC 16,83	DEC 15,83	0.09	0.21	0.015	0.025	0.045	******	0.0933
DEC 19,83	DEC 18,83	******	******	******	******	******	******	******
DEC 22,83	DEC 21,83	******	******	******	******	******	******	******
DEC 23,83	DEC 22,83	******	******	******	******	******	******	******
DEC 24,83	DEC 23,83	******	******	******	******	******	******	******
DEC 27,83	DEC 26,83	******	******	******	******	******	******	******
DEC 28,83	DEC 27,83	******	******	******	******	******	******	******

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : GRAHAM LAKE/DAILY/AEROCHEM #12 PAGE : 10

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICIENCY (%)		COMMENTS FIELD	COMMENTS OFFICE
DEC 29,83	DEC 28,83	700	700	900	2200	3	14.0	2	22852	2	1	U	15	F	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : GRAHAM LAKE/DAILY/AEROCHEM #12 PAGE : 11

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
DEC 29,83	DEC 28,83	140.0	15.6	******	4.67	0.0386	0.55	0.50

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : GRAHAM LAKE/DAILY/AEROCHEM #12 PAGE : 12

REMOVAL DATE	EXPOSURE DATE		CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
DEC 29,83	DEC 28,83	<T	0.02	0.03	0.010	0.020	0.045	0.234	0.0214

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WHITMAN CREEK/DAILY/AEROCHEM #09

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
JAN 8,83	JAN 7,83	800	800	1130	200	3	9.1	2	22177	2	1	****	EF	
JAN 11,83	JAN 10,83	800	800	930	500	3	22.1	2	22178	2	1	****	EF	
JAN 16,83	JAN 15,83	800	800	930	2200	2	2.9	2	22179	2	1	****	EF	
JAN 24,83	JAN 23,83	800	800	930	730	3	7.9	2	22180	2	1	****	EF	
FEB 1,83	JAN 31,83	800	800	830	1900	1	5.5	2	22181	2	1	****	EF	
FEB 3,83	FEB 2,83	800	800	800	2130	1	40.5	2	22182	2	1	****	EF	
FEB 8,83	FEB 7,83	800	800	800	1900	2	9.1	2	22183	2	1	****	EF	
FEB 23,83	FEB 22,83	800	800	1900	500	3	15.1	2	22184	2	1	85		
MAR 4,83	MAR 3,83	800	800	300	600	2	2.5	2	22185	2	1	U 80	J	
MAR 5,83	MAR 4,83	800	800	1300	2200	3	1.3	2	22186	2	1	74		
MAR 7,83	MAR 6,83	800	800	2100	300	1	1.5	2	22187	2	1	****	EF	
MAR 10,83	MAR 9,83	800	800	200	1830	1	7.5	2	22188	2	1	85		
MAR 20,83	MAR 19,83	800	800	930	100	1	17.3	2	22189	2	1	102		
MAR 22,83	MAR 21,83	800	800	930	2200	3	15.1	2	22190	2	1	****	EF	
MAR 28,83	MAR 27,83	800	800	1300	2330	3	16.9	2	22191	2	1	****	EF	
MAR 29,83	MAR 28,83	800	800	1400	2000	2	0.9	2	22192	2	1	156		N
APR 4,83	APR 3,83	800	800	830	1900	1	11.7	2	22194	2	1	59		
APR 5,83	APR 4,83	800	800	1000	2200	1	2.1	2	22195	2	1	86		
APR 8,83	APR 7,83	800	800	830	1600	1	3.9	2	22196	2	1	69		
APR 10,83	APR 9,83	800	800	2330	800	1	13.5	2	22197	2	1	57	C	
APR 11,83	APR 10,83	800	800	800	2100	1	9.9	2	22198	2	1	71	C	
APR 15,83	APR 14,83	800	800	930	1400	1	6.9	2	22199	2	1	****	EF	
APR 16,83	APR 15,83	800	800	830	1500	1	2.8	2	22200	2	1	95		
APR 20,83	APR 19,83	800	800	830	1600	3	4.2	2	22201	2	1	33		N
APR 22,83	APR 21,83	800	800	830	1900	1	7.8	2	22202	2	1	77		H
APR 25,83	APR 24,83	800	800	1130	2100	1	2.0	2	22203	2	1	****	EF	
APR 29,83	APR 28,83	800	800	900	1600	1	8.8	2	22204	2	1	77		
MAY 1,83	APR 30,83	800	800	1030	1300	1	2.2	2	22205	2	1	94	AC	
MAY 2,83	MAY 1,83	800	800	2300	800	1	17.2	2	22206	2	1	104		
MAY 3,83	MAY 2,83	800	800	1845	2300	1	15.4	2	22207	2	1	43	C	N
MAY 9,83	MAY 8,83	800	800	900	1700	1	5.0	1	22209	2	1	78		
MAY 23,83	MAY 22,83	800	800	1600	400	1	5.0	1	22210	2	1	95		
MAY 26,83	MAY 25,83	800	800	1800	300	1	5.0	1	22211	2	1	****	EG	
MAY 30,83	MAY 29,83	800	800	1930	730	1	19.0	1	22212	2	1	94	CD	
MAY 31,83	MAY 30,83	800	800	1700	1800	1	0.9	1	22213	2	1	22	CD	N
JUN 4,83	JUN 3,83	800	800	230	800	1	1.0	1	22215	2	1	18	E	N
JUN 7,83	JUN 6,83	800	800	1000	1830	1	6.8	1	22216	2	1	92		
JUN 18,83	JUN 17,83	800	800	1400	1530	1	****	1	22217	2	1	****	C	
JUN 25,83	JUN 24,83	800	800	2130	2200	1	2.4	1	22218	2	1	110	C	
JUN 26,83	JUN 25,83	800	800	630	800	1	2.0	1	22219	2	1	70	AC	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WHITMAN CREEK/DAILY/AEROCHEM #09

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
JAN 8,83	JAN 7,83	******	******	******	******	******	******	******
JAN 11,83	JAN 10,83	******	******	******	******	******	******	******
JAN 16,83	JAN 15,83	******	******	******	******	******	******	******
JAN 24,83	JAN 23,83	******	******	******	******	******	******	******
FEB 1,83	JAN 31,83	******	******	******	******	******	******	******
FEB 3,83	FEB 2,83	******	******	******	******	******	******	******
FEB 8,83	FEB 7,83	******	******	******	******	******	******	******
FEB 23,83	FEB 22,83	827.0	44.0	4.06	4.03	0.1100	4.05	0.68
MAR 4,83	MAR 3,83	129.0	19.0	******	4.92	0.0280	1.85	0.67
MAR 5,83	MAR 4,83	62.0	******	******	3.74	0.2220	> 10.00	1.11
MAR 7,83	MAR 6,83	******	******	******	******	******	******	******
MAR 10,83	MAR 9,83	411.0	29.2	4.32	4.13	0.0806	2.05	0.51
MAR 20,83	MAR 19,83	1139.0	11.3	******	4.71	0.0404	0.85	0.21
MAR 22,83	MAR 21,83	******	******	******	******	******	******	******
MAR 28,83	MAR 27,83	******	******	******	******	******	******	******
MAR 29,83	MAR 28,83	90.0	19.3	******	4.40	0.0624	1.05	0.83
APR 4,83	APR 3,83	444.0	29.8	U 6.93	******	******	1.60	0.27
APR 5,83	APR 4,83	116.0	68.0	******	3.87	0.1728	4.00	1.50
APR 8,83	APR 7,83	173.0	78.3	******	3.82	0.1904	5.85	1.27
APR 10,83	APR 9,83	498.0	11.3	4.91	4.78	D 0.0334	0.90	0.17
APR 11,83	APR 10,83	452.0	16.8	4.73	4.58	0.0446	0.80	0.18
APR 15,83	APR 14,83	******	******	******	******	******	******	******
APR 16,83	APR 15,83	172.0	77.2	******	3.86	0.1806	5.25	1.53
APR 20,83	APR 19,83	89.0	******	******	4.44	0.0570	2.05	0.22
APR 22,83	APR 21,83	389.0	8.2	G 5.22	5.14	0.0266	0.95	0.04
APR 25,83	APR 24,83	******	******	******	******	******	******	******
APR 29,83	APR 28,83	435.0	62.5	4.30	4.30	0.1042	7.60	1.18
MAY 1,83	APR 30,83	133.0	******	******	4.34	0.0754	3.50	0.36
MAY 2,83	MAY 1,83	1152.0	33.6	4.39	4.30	0.0766	3.50	0.36
MAY 3,83	MAY 2,83	426.0	27.7	4.51	4.44	0.0626	3.10	0.33
MAY 9,83	MAY 8,83	252.0	20.5	4.59	******	******	2.05	0.13
MAY 23,83	MAY 22,83	307.0	20.6	4.66	4.62	0.1254	3.05	0.19
MAY 26,83	MAY 25,83	******	******	******	******	******	******	******
MAY 30,83	MAY 29,83	1146.0	29.4	4.35	4.31	0.0754	3.10	0.34
MAY 31,83	MAY 30,83	13.0	******	******	3.73	D 0.3060	******	******
JUN 4,83	JUN 3,83	12.0	******	******	******	******	******	******
JUN 7,83	JUN 6,83	405.0	37.7	4.19	4.19	0.0968	D 4.60	0.33
JUN 18,83	JUN 17,83	643.0	77.5	3.87	3.92	0.1938	7.90	0.77
JUN 25,83	JUN 24,83	170.0	******	******	U 6.01	0.0178	1.50	0.10
JUN 26,83	JUN 25,83	91.0	******	******	U 4.13	0.1430	U 15.80	1.42

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WHITMAN CREEK/DAILY/AEROCHEM #09

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
JAN 8,83	JAN 7,83	******	******	******	******	******	******	******
JAN 11,83	JAN 10,83	******	******	******	******	******	******	******
JAN 16,83	JAN 15,83	******	******	******	******	******	******	******
JAN 24,83	JAN 23,83	******	******	******	******	******	******	******
FEB 1,83	JAN 31,83	******	******	******	******	******	******	******
FEB 3,83	FEB 2,83	******	******	******	******	******	******	******
FEB 8,83	FEB 7,83	******	******	******	******	******	******	******
FEB 23,83	FEB 22,83	0.07	0.17	0.015	0.035	0.080	0.690	0.0933
MAR 4,83	MAR 3,83	1.04	0.38	U 0.165	0.105	0.285	******	0.0120
MAR 5,83	MAR 4,83	******	0.54	******	******	******	******	0.1820
MAR 7,83	MAR 6,83	******	******	******	******	******	******	******
MAR 10,83	MAR 9,83	0.10	0.09	0.020	0.010	0.045	0.142	0.0741
MAR 20,83	MAR 19,83	0.05	0.11	0.015	0.015	0.065	0.116	0.0195
MAR 22,83	MAR 21,83	******	******	******	******	******	******	******
MAR 28,83	MAR 27,83	******	******	******	******	******	******	******
MAR 29,83	MAR 28,83	0.06	0.03	0.010	0.020	0.035	******	0.0398
APR 4,83	APR 3,83	******	D 0.76	******	******	******	0.052	******
APR 5,83	APR 4,83	0.32	0.28	0.065	0.050	0.120	0.570	0.1349
APR 8,83	APR 7,83	0.25	0.16	0.030	0.050	0.030	0.490	0.1514
APR 10,83	APR 9,83	0.14	0.07	0.020	0.040	0.020	0.056	0.0166
APR 11,83	APR 10,83	0.05	0.06	0.010	0.030	0.020	0.104	0.0263
APR 15,83	APR 14,83	******	******	******	******	******	******	******
APR 16,83	APR 15,83	0.62	0.29	0.090	D 0.040	0.020	0.400	0.1380
APR 20,83	APR 19,83	0.15	0.94	0.090	0.040	0.580	0.132	0.0363
APR 22,83	APR 21,83	0.05	0.04	0.015	0.020	0.055	0.244	0.0072
APR 25,83	APR 24,83	******	******	******	******	******	******	******
APR 29,83	APR 28,83	G 1.43	0.29	G 0.230	0.130	0.115	1.410	0.0501
MAY 1,83	APR 30,83	D 0.36	0.12	D 0.050	0.080	0.085	0.510	0.0457
MAY 2,83	MAY 1,83	0.28	0.10	0.045	0.075	0.060	0.480	0.0501
MAY 3,83	MAY 2,83	0.36	0.13	0.065	0.050	0.100	0.500	0.0363
MAY 9,83	MAY 8,83	0.12	0.07	0.025	0.040	0.025	0.144	******
MAY 23,83	MAY 22,83	0.59	0.06	0.030	0.060	0.055	0.312	0.0240
MAY 26,83	MAY 25,83	******	******	******	******	******	******	******
MAY 30,83	MAY 29,83	0.12	0.08	0.035	0.050	0.050	0.380	0.0490
MAY 31,83	MAY 30,83	******	******	******	******	******	******	0.1862
JUN 4,83	JUN 3,83	******	******	******	******	******	******	******
JUN 7,83	JUN 6,83	0.05	0.05	0.005	0.030	0.030	0.620	0.0646
JUN 18,83	JUN 17,83	0.28	0.22	0.040	0.040	0.045	0.580	0.1202
JUN 25,83	JUN 24,83	0.59	0.08	0.115	0.115	0.045	0.018	U 0.0010
JUN 26,83	JUN 25,83	******	0.49	******	******	******	U 2.450	U 0.0741

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WHITMAN CREEK/DAILY/AEROCHEM #09

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES		SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
JUN 27,83	JUN 26,83	800	800	2300	800	1	16.0	1	22220	2	1		71	C	
JUL 5,83	JUL 4,83	800	800	2000	300	1	16.8	1	22221	2	1		88	CD	J
JUL 9,83	JUL 8,83	800	800	1700	1830	1	1.0	1	22222	2	1		46		N
JUL 29,83	JUL 28,83	800	800	1600	1800	1	1.0	1	22223	2	1		84	C	
JUL 30,83	JUL 29,83	800	800	30	130	1	12.0	1	22224	2	1		99	AC	C
AUG 1,83	JUL 31,83	800	800	830	400	1	13.3	1	22225	2	1		97		M
AUG 7,83	AUG 6,83	800	800	2015	2055	1	11.0	1	22228	2	1		89	C	
AUG 9,83	AUG 8,83	800	800	1715	1755	1	2.1	1	22229	2	1		93	AC	
AUG 12,83	AUG 11,83	800	800	900	1800	1	2.8	1	22230	2	1		50		HM
AUG 18,83	AUG 17,83	800	800	300	430	1	8.0	1	22231	2	1		135	C	NHM
AUG 21,83	AUG 20,83	800	800	400	800	1	13.0	1	22232	2	1		107	AC	
AUG 28,83	AUG 27,83	800	800	1500	1630	1	16.0	1	22233	2	1		89	AC	
AUG 31,83	AUG 30,83	800	800	****	****	1	1.3	1	22234	2	1		52	AC	
SEP 6,83	SEP 5,83	800	800	600	630	1	2.4	1	22236	2	1		100		
SEP 10,83	SEP 9,83	800	800	2300	2315	1	4.2	1	22237	2	1		92		J
SEP 17,83	SEP 16,83	800	800	1500	2300	1	12.8	1	22238	2	1		137		N
SEP 18,83	SEP 17,83	800	800	1030	1500	1	2.4	1	22239	2	1		83		
SEP 19,83	SEP 18,83	800	800	2300	30	1	2.8	1	22240	2	1		81		
SEP 22,83	SEP 21,83	800	800	900	1600	1	25.0	1	22241	2	1		111		
OCT 4,83	OCT 3,83	800	800	200	400	1	1.8	1	22242	2	1		62	C	
OCT 5,83	OCT 4,83	800	800	1400	600	1	16.8	1	22243	2	1		98		
OCT 6,83	OCT 5,83	800	800	900	500	1	37.4	1	22246	2	1		111		
OCT 8,83	OCT 7,83	800	800	730	800	1	1.0	1	22247	2	1		67	C	
OCT 9,83	OCT 8,83	800	800	900	1900	1	5.4	1	22248	2	1		88		
OCT 12,83	OCT 11,83	800	800	300	800	1	1.2	1	22249	2	1		19		N
OCT 13,83	OCT 12,83	800	800	200	700	1	16.6	1	22250	2	1		97		HCM
OCT 14,83	OCT 13,83	800	800	800	200	1	16.0	1	22251	2	1		101		
OCT 15,83	OCT 14,83	800	800	930	1300	1	3.2	1	22252	2	1		56		
OCT 23,83	OCT 22,83	800	800	300	730	1	3.6	1	22253	2	1		53		
OCT 24,83	OCT 23,83	800	800	800	700	1	15.4	1	22254	2	1		84		
OCT 26,83	OCT 25,83	800	800	2200	200	1	1.8	1	22255	2	1		39	C	N
OCT 27,83	OCT 26,83	800	800	2100	100	1	2.0	1	22256	2	1		57	C	
NOV 3,83	NOV 2,83	800	800	730	800	1	23.4	1	22257	2	1		99		
NOV 4,83	NOV 3,83	800	800	300	800	2	****	1	22258	2	1		****		J
NOV 11,83	NOV 10,83	800	800	2000	200	1	9.2	1	22259	2	1		73		J
NOV 21,83	NOV 20,83	800	800	****	****	3	****	1	22260	2	1		****		
NOV 24,83	NOV 23,83	800	800	****	****	2	****	*	22262	2	1		****		
NOV 29,83	NOV 28,83	800	800	800	200	3	10.5	2	22263	2	1		64		J
DEC 3,83	DEC 2,83	800	800	1030	100	2	4.2	2	22264	2	1		34		N
DEC 5,83	DEC 4,83	800	800	830	2100	2	10.8	2	22265	2	1	U	21	G	C

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WHITMAN CREEK/DAILY/AEROCHEM #09

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM		PH FIELD		PH LAB	TOTAL H+ TO PH8.3 MG/L		SULPHATE MG/L	NITRATE AS N MG/L
JUN 27,83	JUN 26,83	736.0	65.5		3.99		4.04	0.1462		7.65	0.90
JUL 5,83	JUL 4,83	948.0	30.5	U	6.82		4.26	0.0790		3.40	0.29
JUL 9,83	JUL 8,83	30.0	******		******	G	6.64	0.0236		5.10	0.91
JUL 29,83	JUL 28,83	54.0	******		******		3.88	0.2520		13.80	1.68
JUL 30,83	JUL 29,83	768.0	19.3		4.41		4.72	0.0478		1.70	0.32
AUG 1,83	JUL 31,83	835.0	50.0		4.01		4.18	0.1188		4.70	0.50
AUG 7,83	AUG 6,83	634.0	24.2		4.38		4.49	0.0644		2.55	0.18
AUG 9,83	AUG 8,83	126.0	17.3		******	U	7.19	0.0160		2.65	0.69
AUG 12,83	AUG 11,83	91.0	******		******		4.39	0.0876		3.30	0.43
AUG 18,83	AUG 17,83	697.0	120.0		3.51		3.78	******		11.20	1.12
AUG 21,83	AUG 20,83	897.0	24.5		4.29		4.45	0.0582		2.35	0.19
AUG 28,83	AUG 27,83	921.0	18.0		4.51		4.61	0.0518		1.85	0.22
AUG 31,83	AUG 30,83	44.0	******		******		4.68	0.0508		1.55	0.54
SEP 6,83	SEP 5,83	154.0	143.0		******		3.63	0.3180	G	17.80	1.44
SEP 10,83	SEP 9,83	250.0	22.0		4.13		4.63	0.0512		2.30	0.43
SEP 17,83	SEP 16,83	1132.0	57.3		3.85		4.02	0.1008		4.30	0.94
SEP 18,83	SEP 17,83	128.0	22.5		******		4.45	0.0388		1.80	0.36
SEP 19,83	SEP 18,83	146.0	55.3		******		4.12	0.0808		5.75	1.00
SEP 22,83	SEP 21,83	1780.0	17.5		4.71		4.46	0.0530		2.10	0.20
OCT 4,83	OCT 3,83	72.0	62.0		******		4.00	0.1430		7.80	1.25
OCT 5,83	OCT 4,83	1065.0	40.2		3.90		4.15	0.0984		4.75	0.57
OCT 6,83	OCT 5,83	2679.0	10.3		4.46		4.71	0.0362		1.05	0.10
OCT 8,83	OCT 7,83	43.0	******		******		4.20	0.1020		5.50	1.59
OCT 9,83	OCT 8,83	306.0	31.0		4.12		4.29	0.0730		4.00	0.56
OCT 12,83	OCT 11,83	15.0	******		******	G	6.90	0.0172		******	******
OCT 13,83	OCT 12,83	1037.0	5.4		4.79	G	5.27	0.0242		0.25	0.13
OCT 14,83	OCT 13,83	1036.0	10.8		4.64		4.75	0.0356		0.85	0.16
OCT 15,83	OCT 14,83	116.0	15.8		******		4.62	0.0466		1.45	0.28
OCT 23,83	OCT 22,83	123.0	27.7		******		4.35	0.0672		1.90	0.69
OCT 24,83	OCT 23,83	832.0	11.5		4.63		4.80	0.0368		0.80	0.13
OCT 26,83	OCT 25,83	45.0	******		******		4.40	0.0760		3.45	0.88
OCT 27,83	OCT 26,83	74.0	******		******		5.07	0.0306		1.10	0.15
NOV 3,83	NOV 2,83	1499.0	26.6		4.04		4.35	0.0742		2.90	0.50
NOV 4,83	NOV 3,83	295.0	10.5		4.36		4.91	0.0340		1.15	0.12
NOV 11,83	NOV 10,83	435.0	10.7		4.29		5.02	0.0240		0.90	0.11
NOV 21,83	NOV 20,83	629.0	22.4		4.03		4.41	0.0564		1.65	0.40
NOV 24,83	NOV 23,83	83.0	******		******		3.94	0.1384		******	******
NOV 29,83	NOV 28,83	432.0	14.9		3.77		4.61	0.0416		1.45	0.18
DEC 3,83	DEC 2,83	93.0	******		******		4.39	0.0676		4.15	0.80
DEC 5,83	DEC 4,83	147.0	9.0		******		5.05	0.0258		0.50	0.23

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WHITMAN CREEK/DAILY/AEROCHEM #09

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
JUN 27,83	JUN 26,83	0.58	0.24	0.125	0.070	0.055	1.000	0.0912
JUL 5,83	JUL 4,83	0.17	0.12	0.040	0.025	0.050	0.246	0.0550
JUL 9,83	JUL 8,83	******	0.22	******	******	******	******	G 0.0002
JUL 29,83	JUL 28,83	******	0.57	******	******	******	******	0.1318
JUL 30,83	JUL 29,83	0.30	0.11	0.025	0.015	0.030	0.200	0.0191
AUG 1,83	JUL 31,83	0.12	0.12	0.010	0.030	0.045	0.440	0.0661
AUG 7,83	AUG 6,83	0.24	0.06	0.030	0.015	<T 0.010	0.132	0.0324
AUG 9,83	AUG 8,83	U 2.08	0.11	U 0.225	0.070	0.045	0.400	U 0.0001
AUG 12,83	AUG 11,83	0.36	0.14	0.050	0.030	0.025	0.180	0.0407
AUG 18,83	AUG 17,83	0.33	0.22	0.085	0.060	0.040	0.610	0.1660
AUG 21,83	AUG 20,83	0.16	0.09	0.035	0.040	0.070	0.218	0.0355
AUG 28,83	AUG 27,83	0.12	0.04	0.015	0.025	<T 0.010	0.280	0.0245
AUG 31,83	AUG 30,83	******	0.07	******	******	******	0.860	0.0209
SEP 6,83	SEP 5,83	1.06	0.34	G 0.235	G 0.265	0.080	1.590	0.2344
SEP 10,83	SEP 9,83	0.62	0.23	0.085	0.100	0.120	0.174	0.0234
SEP 17,83	SEP 16,83	0.29	0.29	0.055	0.030	0.145	0.440	0.0955
SEP 18,83	SEP 17,83	0.25	0.07	0.010	0.025	0.040	0.146	0.0355
SEP 19,83	SEP 18,83	1.05	0.19	0.145	0.120	0.060	0.660	0.0759
SEP 22,83	SEP 21,83	0.11	0.05	0.010	0.045	<W 0.005	0.210	0.0347
OCT 4,83	OCT 3,83	1.24	0.29	U 0.235	0.070	<W 0.005	0.530	0.1000
OCT 5,83	OCT 4,83	0.29	0.13	0.030	0.050	<W 0.005	0.600	0.0708
OCT 6,83	OCT 5,83	<T 0.02	0.03	<W 0.005	<T 0.015	<W 0.005	0.064	0.0195
OCT 8,83	OCT 7,83	******	0.39	******	******	******	******	0.0631
OCT 9,83	OCT 8,83	0.53	0.12	0.065	0.055	<W 0.005	0.430	0.0513
OCT 12,83	OCT 11,83	******	******	******	******	******	******	G 0.0001
OCT 13,83	OCT 12,83	0.04	0.16	0.010	<T 0.010	<W 0.005	0.054	G 0.0054
OCT 14,83	OCT 13,83	0.06	<W 0.01	0.010	<T 0.015	0.015	0.104	0.0178
OCT 15,83	OCT 14,83	0.14	0.04	0.015	0.040	0.060	0.204	0.0240
OCT 23,83	OCT 22,83	0.24	0.21	0.045	0.090	0.200	******	0.0447
OCT 24,83	OCT 23,83	0.10	0.02	0.005	<T 0.015	0.025	0.092	0.0158
OCT 26,83	OCT 25,83	******	0.24	******	******	******	******	0.0398
OCT 27,83	OCT 26,83	******	<W 0.01	******	******	******	0.102	0.0085
NOV 3,83	NOV 2,83	0.19	<W 0.01	0.030	0.040	0.030	0.344	0.0447
NOV 4,83	NOV 3,83	0.08	<W 0.01	0.010	0.045	0.020	0.160	0.0123
NOV 11,83	NOV 10,83	******	0.12	******	******	******	******	0.0095
NOV 21,83	NOV 20,83	0.05	0.12	0.010	0.025	0.050	0.234	0.0389
NOV 24,83	NOV 23,83	0.54	******	0.070	0.075	0.250	0.276	0.1148
NOV 29,83	NOV 28,83	0.10	0.07	0.015	0.030	0.025	0.134	0.0245
DEC 3,83	DEC 2,83	0.72	0.50	G 0.120	0.115	0.240	0.720	0.0407
DEC 5,83	DEC 4,83	0.23	0.13	0.030	0.025	0.045	<T 0.002	0.0089

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WHITMAN CREEK/DAILY/AEROCHEM #09 PAGE : 7

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
DEC 6,83	DEC 5,83	800	800	1700	800	3	10.2	2	22266	2	1	U 4	EFI	N
DEC 7,83	DEC 6,83	800	800	830	400	3	12.8	2	22267	2	1	****	EFI	
DEC 13,83	DEC 12,83	800	800	400	2300	3	6.2	2	22268	2	1	****	EF	
DEC 22,83	DEC 21,83	800	800	2000	800	2	4.6	2	22269	2	1	****	EF	
DEC 23,83	DEC 22,83	800	800	800	1800	3	4.0	2	22270	2	1	****	EF	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WHITMAN CREEK/DAILY/AEROCHEM #09 PAGE : 8

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
DEC 6,83	DEC 5,83	28.0	******	******	4.11	0.0988	6.00	1.28
DEC 7,83	DEC 6,83	******	******	******	******	******	******	******
DEC 13,83	DEC 12,83	******	******	******	******	******	******	******
DEC 22,83	DEC 21,83	******	******	******	******	******	******	******
DEC 23,83	DEC 22,83	******	******	******	******	******	******	******

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WHITMAN CREEK/DAILY/AEROCHEM #09

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
DEC 6,83	DEC 5,83	******	0.27	******	******	******	******	0.0776
DEC 7,83	DEC 6,83	******	******	******	******	******	******	******
DEC 13,83	DEC 12,83	******	******	******	******	******	******	******
DEC 22,83	DEC 21,83	******	******	******	******	******	******	******
DEC 23,83	DEC 22,83	******	******	******	******	******	******	******

PART VI

NORTHWESTERN REGION

DAILY PRECIPITATION CHEMISTRY LISTINGS

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : FERNBERG/DAILY/AEROCHEM #16 PAGE : 1

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES		SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
JAN 5,83	JAN 4,83	830	830	900	1000	2	2.1	2	32074	2	1		26	C	N
JAN 6,83	JAN 5,83	830	830	900	1200	2	5.9	2	32075	2	1		79	CQ	
JAN 10,83	JAN 9,83	830	1100	2300	1030	2	12.9	2	32076	2	1		78	D	
JAN 13,83	JAN 12,83	830	830	100	830	2	9.3	2	32077	2	1		42	C	N
JAN 14,83	JAN 13,83	830	830	830	1200	2	2.5	2	32078	2	1		48	D	N
JAN 29,83	JAN 28,83	830	830	1200	600	2	15.7	2	32079	2	1		74	DC	
FEB 9,83	FEB 8,83	830	830	1100	300	2	1.9	2	32080	2	1		68	D	
FEB 19,83	FEB 18,83	830	830	1700	2400	2	10.9	2	32081	2	1		92	D	
FEB 27,83	FEB 26,83	830	830	1100	1700	1	2.7	2	32082	2	1		51	D	
MAR 4,83	MAR 3,83	830	830	1200	1500	2	5.1	2	32083	2	1		101		
MAR 5,83	MAR 4,83	830	830	2400	200	2	1.3	2	32084	2	1		69	C	
MAR 15,83	MAR 14,83	830	830	1100	1500	3	0.6	2	32085	2	1		70		
MAR 17,83	MAR 16,83	830	830	100	300	2	1.6	2	32086	2	1		99	CD	
MAR 31,83	MAR 30,83	830	830	830	830	3	1.7	2	32087	2	1		29	C	N
APR 1,83	MAR 31,83	830	830	1200	1500	2	3.3	2	32088	2	1		70	C	
APR 7,83	APR 6,83	830	830	300	600	2	6.6	2	32089	2	1		29	CD	N
APR 15,83	APR 14,83	830	830	1000	1800	2	22.9	2	32090	2	1		3	CD	N
APR 17,83	APR 16,83	830	830	1300	830	3	1.5	2	32091	2	1		148	CD	N
APR 27,83	APR 26,83	830	830	****	****	1	0.1	1	32093	2	1		****	EK	
APR 29,83	APR 28,83	830	830	1800	2000	1	5.0	2	32092	2	1		82	CD	
MAY 10,83	MAY 9,83	830	830	300	500	1	****	1	32094	2	1		****	CD	
MAY 13,83	MAY 12,83	830	830	300	600	1	12.2	1	32095	2	1		72	D	HM
MAY 18,83	MAY 17,83	830	830	****	****	1	4.1	1	32096	2	1		98	D	
MAY 19,83	MAY 18,83	830	830	830	1200	1	4.0	1	32097	2	1		98	D	
MAY 22,83	MAY 21,83	830	830	****	****	1	4.5	1	32098	2	1		96	CD	
MAY 29,83	MAY 28,83	830	830	****	****	1	21.2	1	32099	2	1		97	D	H
MAY 30,83	MAY 29,83	830	830	****	****	1	2.9	1	32100	2	1		53	D	
JUN 11,83	JUN 10,83	830	****	****	45	1	19.4	1	32103	2	1		36	ACD	
JUN 13,83	JUN 12,83	830	830	****	****	1	6.5	1	32104	2	1		101	CD	H
JUN 16,83	JUN 15,83	830	830	1300	1430	1	28.0	1	32101	2	1		95	D	H
JUN 22,83	JUN 21,83	830	830	600	715	1	1.8	1	32102	2	1		71	D	
JUL 1,83	JUN 30,83	830	830	1800	2000	1	9.0	1	32105	2	1	U	37	DG	H
JUL 3,83	JUL 2,83	830	830	****	****	1	18.0	1	32106	2	1		37	D	NH
JUL 4,83	JUL 3,83	830	830	2400	730	1	48.3	1	32107	2	1		111	D	
JUL 14,83	JUL 13,83	830	830	200	700	1	15.8	1	32108	2	1		39	CD	NH
JUL 30,83	JUL 29,83	800	800	2200	2400	1	8.1	1	32109	2	1		87	CD	
AUG 1,83	JUL 30,83	800	800	1000	1200	1	10.2	1	32110	2	1		91	CD	Y2
AUG 3,83	AUG 2,83	830	830	1100	1300	1	8.0	1	32111	2	1		78	CD	
AUG 8,83	AUG 7,83	830	830	200	300	1	0.1	1	32112	2	1		****	E	
AUG 10,83	AUG 9,83	830	830	300	500	1	15.0	1	32113	2	1		102	D	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : FERNBERG/DAILY/AEROCHEM #16

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
JAN 5,83	JAN 4,83	36.0	******	******	4.66	0.0442	0.35	0.27
JAN 6,83	JAN 5,83	300.0	5.2	******	5.04	0.0362	0.15	0.13
JAN 10,83	JAN 9,83	648.0	9.5	******	4.70	0.0462	0.40	0.27
JAN 13,83	JAN 12,83	253.0	7.5	******	4.75	0.0404	0.30	0.21
JAN 14,83	JAN 13,83	77.0	******	******	4.81	0.0386	0.25	0.19
JAN 29,83	JAN 28,83	750.0	13.3	******	4.53	0.0524	1.05	0.28
FEB 9,83	FEB 8,83	84.0	******	******	******	******	1.00	0.97
FEB 19,83	FEB 18,83	644.0	9.1	******	4.91	0.0348	0.65	0.26
FEB 27,83	FEB 26,83	89.0	******	******	5.13	0.0502	0.65	0.24
MAR 4,83	MAR 3,83	333.0	21.7	******	G 6.80	0.0294	3.35	0.79
MAR 5,83	MAR 4,83	58.0	******	******	******	******	3.60	0.82
MAR 15,83	MAR 14,83	27.0	******	******	4.93	0.0302	1.05	0.13
MAR 17,83	MAR 16,83	102.0	******	******	G 6.30	0.0146	0.10	0.05
MAR 31,83	MAR 30,83	32.0	******	******	5.19	0.0296	1.35	0.42
APR 1,83	MAR 31,83	150.0	******	******	4.32	G 0.1526	2.95	0.56
APR 7,83	APR 6,83	123.0	******	******	5.12	0.0280	0.40	0.12
APR 15,83	APR 14,83	56.0	******	******	5.01	0.0304	0.90	0.12
APR 17,83	APR 16,83	143.0	******	******	4.69	0.0420	1.70	0.10
APR 27,83	APR 26,83	******	******	******	******	******	******	******
APR 29,83	APR 28,83	263.0	19.3	******	U 7.07	0.0224	2.70	U 0.48
MAY 10,83	MAY 9,83	27.0	******	******	5.94	0.0264	******	******
MAY 13,83	MAY 12,83	569.0	2.2	******	U 6.04	0.0178	<T 0.05	<W 0.01
MAY 18,83	MAY 17,83	259.0	18.1	******	4.54	0.0532	1.60	0.19
MAY 19,83	MAY 18,83	253.0	18.4	******	4.55	0.0532	1.55	0.19
MAY 22,83	MAY 21,83	279.0	7.8	******	U 6.66	0.0348	0.90	0.21
MAY 29,83	MAY 28,83	1321.0	7.3	******	5.23	0.0270	0.75	0.09
MAY 30,83	MAY 29,83	99.0	******	******	******	******	1.40	0.03
JUN 11,83	JUN 10,83	458.0	7.4	******	6.17	0.0170	0.95	0.24
JUN 13,83	JUN 12,83	423.0	16.0	******	5.17	0.0290	2.95	0.45
JUN 16,83	JUN 15,83	1711.0	8.7	******	5.12	0.0268	1.15	0.14
JUN 22,83	JUN 21,83	83.0	******	******	U 6.05	0.0254	G 5.05	G 0.88
JUL 1,83	JUN 30,83	215.0	5.6	******	5.33	0.0202	0.60	0.12
JUL 3,83	JUL 2,83	431.0	5.6	******	5.28	0.0204	0.60	0.12
JUL 4,83	JUL 3,83	3443.0	5.7	******	5.28	0.0202	0.55	0.12
JUL 14,83	JUL 13,83	404.0	8.6	******	5.69	0.0240	1.25	0.19
JUL 30,83	JUL 29,83	456.0	7.1	******	5.09	0.0272	0.50	0.16
AUG 1,83	JUL 30,83	598.0	6.8	******	5.22	0.0262	0.50	0.16
AUG 3,83	AUG 2,83	405.0	16.0	******	5.66	0.0258	2.00	0.70
AUG 8,83	AUG 7,83	******	******	******	******	******	******	******
AUG 10,83	AUG 9,83	989.0	5.0	******	5.26	0.0236	0.40	0.07

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : FERNBERG/DAILY/AEROCHEM #16

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
JAN 5,83	JAN 4,83	******	******	******	******	******	******	0.0219
JAN 6,83	JAN 5,83	<T 0.02	0.06	<W 0.005	<T 0.010	<T 0.010	0.076	0.0091
JAN 10,83	JAN 9,83	<W 0.01	0.05	0.005	0.015	<T 0.005	0.092	0.0200
JAN 13,83	JAN 12,83	0.07	0.10	0.020	0.015	0.025	0.016	0.0178
JAN 14,83	JAN 13,83	******	0.10	******	******	******	******	0.0155
JAN 29,83	JAN 28,83	0.03	0.10	<T 0.005	0.020	0.030	0.264	0.0295
FEB 9,83	FEB 8,83	0.11	0.08	0.015	0.025	0.030	******	******
FEB 19,83	FEB 18,83	0.06	0.07	0.010	0.010	<W 0.005	0.180	0.0123
FEB 27,83	FEB 26,83	0.17	0.05	0.025	U 0.160	U 0.165	******	0.0074
MAR 4,83	MAR 3,83	0.25	0.10	0.020	0.035	0.040	1.890	G 0.0002
MAR 5,83	MAR 4,83	******	0.30	******	******	******	1.940	******
MAR 15,83	MAR 14,83	******	0.25	******	******	******	******	0.0117
MAR 17,83	MAR 16,83	0.06	0.07	0.010	0.020	0.050	******	G 0.0005
MAR 31,83	MAR 30,83	******	0.25	******	******	******	******	0.0065
APR 1,83	MAR 31,83	0.12	0.10	0.020	0.030	0.030	0.392	0.0479
APR 7,83	APR 6,83	0.11	0.08	0.015	0.030	0.030	0.056	0.0076
APR 15,83	APR 14,83	******	0.08	******	******	******	******	0.0098
APR 17,83	APR 16,83	0.10	0.23	0.015	0.050	G 0.135	0.112	0.0204
APR 27,83	APR 26,83	******	******	******	******	******	******	******
APR 29,83	APR 28,83	U 1.37	0.10	U 0.100	0.080	0.055	U 1.070	U 0.0001
MAY 10,83	MAY 9,83	******	******	******	******	******	******	0.0011
MAY 13,83	MAY 12,83	0.04	0.21	0.005	0.075	U 0.215	0.124	U 0.0009
MAY 18,83	MAY 17,83	0.07	0.05	0.015	0.030	0.020	0.220	0.0288
MAY 19,83	MAY 18,83	0.07	0.05	0.015	0.030	0.025	0.220	0.0282
MAY 22,83	MAY 21,83	0.16	0.03	0.045	0.040	0.020	0.620	U 0.0002
MAY 29,83	MAY 28,83	0.07	0.03	0.010	0.045	0.055	0.220	0.0059
MAY 30,83	MAY 29,83	0.05	0.08	0.010	0.075	0.045	0.166	******
JUN 11,83	JUN 10,83	0.18	0.16	0.030	0.060	0.040	0.430	0.0007
JUN 13,83	JUN 12,83	0.54	0.29	0.095	0.120	0.125	0.660	0.0068
JUN 16,83	JUN 15,83	0.10	0.17	0.020	0.075	D 0.035	0.206	0.0076
JUN 22,83	JUN 21,83	******	U 0.43	******	******	******	******	U 0.0009
JUL 1,83	JUN 30,83	0.08	0.15	0.010	0.035	0.040	0.136	0.0047
JUL 3,83	JUL 2,83	0.06	0.13	0.010	0.020	0.020	0.148	0.0052
JUL 4,83	JUL 3,83	0.08	0.12	0.010	0.100	0.115	0.142	0.0052
JUL 14,83	JUL 13,83	0.32	0.06	0.040	0.090	0.065	0.430	0.0020
JUL 30,83	JUL 29,83	0.07	0.04	0.025	0.050	0.030	0.106	0.0081
AUG 1,83	JUL 30,83	0.10	0.04	0.035	0.060	0.030	0.118	0.0060
AUG 3,83	AUG 2,83	U 0.52	U 0.21	0.085	0.095	0.100	0.830	0.0022
AUG 8,83	AUG 7,83	******	******	******	******	******	******	******
AUG 10,83	AUG 9,83	0.05	0.02	<W 0.005	0.020	<W 0.005	0.124	0.0055

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : FERNBERG/DAILY/AEROCHEM #16 PAGE : 4

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES		SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
AUG 11,83	AUG 10,83	830	830	830	1100	1	1.0	1	32114	2	1		****	E	
AUG 14,83	AUG 13,83	830	830	900	1300	1	6.7	1	32116	2	1		76	ACD	
AUG 20,83	AUG 19,83	830	830	200	300	1	28.4	1	32117	2	1		93	ACD	
AUG 21,83	AUG 20,83	830	830	300	400	1	7.8	1	32118	2	1		98	CD	
AUG 24,83	AUG 23,83	830	830	200	400	1	29.4	1	32119	2	1		108	C	
AUG 25,83	AUG 24,83	830	830	200	400	1	11.2	1	32120	2	1		116	CD	H
AUG 27,83	AUG 26,83	830	830	2200	2400	1	8.8	1	32121	2	1		75	C	HM
AUG 30,83	AUG 29,83	830	830	900	1100	1	7.0	1	32122	2	1		92	ACD	
SEP 4,83	SEP 3,83	830	830	900	1030	1	4.1	1	32123	2	1		81	D	
SEP 5,83	SEP 4,83	830	830	1900	2400	1	2.6	1	32124	2	1		87	CD	C
SEP 6,83	SEP 5,83	830	830	2400	730	1	6.8	1	32125	2	1		97	C	HM
SEP 9,83	SEP 8,83	830	830	2330	400	1	90.6	1	32126	2	1	U	8	H	N
SEP 10,83	SEP 9,83	830	830	300	800	1	17.2	1	32127	2	1		83		HM
SEP 15,83	SEP 14,83	830	830	1200	1300	1	2.0	1	32128	2	1		56	C	
SEP 16,83	SEP 15,83	830	830	1200	400	1	10.0	1	32129	2	1		101		
SEP 18,83	SEP 17,83	830	830	1800	2000	1	5.2	1	32130	2	1		100	C	
SEP 23,83	SEP 22,83	830	830	1000	1200	1	7.0	1	32136	2	1		106	AD	C
SEP 29,83	SEP 28,83	830	830	200	600	1	14.4	1	32137	2	1		99	CD	
SEP 30,83	SEP 29,83	830	830	200	600	1	24.2	1	32138	2	1		105	CD	
OCT 1,83	SEP 30,83	830	900	400	845	1	7.2	1	32139	2	1		99	CD	
OCT 3,83	OCT 2,83	830	900	600	830	1	13.4	1	32140	2	1		96	CD	H
OCT 4,83	OCT 3,83	900	830	****	****	1	0.2	1	32141	2	1		****	E	
OCT 5,83	OCT 4,83	830	830	1200	400	1	13.2	1	32142	2	1		90		
OCT 6,83	OCT 5,83	830	830	2300	2340	1	0.5	1	32143	2	1		****	E	
OCT 8,83	OCT 7,83	830	830	830	1130	1	10.2	1	32144	2	1		89		C
OCT 11,83	OCT 10,83	830	830	1000	1300	1	18.0	1	32145	2	1		93	C	
OCT 14,83	OCT 13,83	830	830	****	2230	3	12.4	1	32146	2	1		53	C	HCM
OCT 16,83	OCT 15,83	830	830	1600	1830	1	20.0	2	32147	2	1		87	CQ	C
NOV 10,83	NOV 9,83	830	830	2400	600	2	2.5	2	32148	2	1		26	C	N
NOV 19,83	NOV 18,83	830	830	****	****	3	****	2	32149	2	1		****	C	
NOV 20,83	NOV 19,83	830	830	1900	2200	3	23.5	2	32150	2	1		84		
NOV 21,83	NOV 20,83	830	900	1100	1800	3	10.6	2	32152	2	1		65	C	
NOV 24,83	NOV 23,83	830	900	****	****	2	35.2	2	32153	2	1	U	0	IM	
NOV 29,83	NOV 28,83	830	830	****	****	2	14.7	2	32154	2	1		47	CD	N
DEC 11,83	DEC 10,83	830	830	900	1400	2	15.4	2	32155	2	1		11	D	N
DEC 14,83	DEC 13,83	830	830	830	1400	2	0.1	2	32156	2	1		****	E	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : FERNBERG/DAILY/AEROCHEM #16

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD		PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L		NITRATE AS N MG/L
AUG 11,83	AUG 10,83	******	******	******		******	******	******		******
AUG 14,83	AUG 13,83	328.0	10.8	******	G	6.82	0.0212	1.15		0.39
AUG 20,83	AUG 19,83	1694.0	8.3	******	G	6.74	0.0170	1.05		0.22
AUG 21,83	AUG 20,83	490.0	10.4	******	G	6.84	0.0160	1.60		0.27
AUG 24,83	AUG 23,83	2045.0	5.9	******		5.37	0.0240	0.65		0.09
AUG 25,83	AUG 24,83	836.0	******	******		5.83	0.0216	0.65		0.15
AUG 27,83	AUG 26,83	424.0	8.0	******		5.08	0.0290	0.60		0.14
AUG 30,83	AUG 29,83	415.0	8.5	******	G	6.24	0.0208	1.30		0.33
SEP 4,83	SEP 3,83	215.0	14.1	******		4.93	0.0362	2.10		0.46
SEP 5,83	SEP 4,83	146.0	3.4	******	G	6.41	0.0160	0.30	<W	0.01
SEP 6,83	SEP 5,83	427.0	3.4	******		5.58	0.0202	0.25		0.06
SEP 9,83	SEP 8,83	470.0	4.5	******	G	6.44	0.0172	0.60		0.12
SEP 10,83	SEP 9,83	916.0	4.5	******		5.32	0.0232	0.30		0.11
SEP 15,83	SEP 14,83	72.0	10.8	******		4.77	0.0382	1.35	<W	0.01
SEP 16,83	SEP 15,83	652.0	10.0	******		4.73	0.0396	0.75		0.16
SEP 18,83	SEP 17,83	334.0	16.3	******		4.65	0.0462	2.05		0.39
SEP 23,83	SEP 22,83	479.0	4.5	******		5.97	0.0202	0.60		0.02
SEP 29,83	SEP 28,83	915.0	9.0	******		5.42	0.0242	1.30		0.18
SEP 30,83	SEP 29,83	1642.0	9.3	******	U	6.48	0.0236	1.65		0.23
OCT 1,83	SEP 30,83	457.0	11.2	******		5.36	0.0242	1.65		0.27
OCT 3,83	OCT 2,83	827.0	8.2	******		5.75	0.0208	1.05		0.19
OCT 4,83	OCT 3,83	******	******	******		******	******	******		******
OCT 5,83	OCT 4,83	762.0	5.1	******		5.77	0.0204	0.65		0.09
OCT 6,83	OCT 5,83	******	******	******		******	******	******		******
OCT 8,83	OCT 7,83	583.0	5.0	******		5.54	0.0190	0.40		0.08
OCT 11,83	OCT 10,83	1077.0	11.8	******		4.79	0.0384	1.20		0.18
OCT 14,83	OCT 13,83	429.0	4.5	******		5.43	0.0216	0.25		0.09
OCT 16,83	OCT 15,83	1125.0	8.5	******		5.06	0.0272	0.90		0.10
NOV 10,83	NOV 9,83	43.0	******	******		5.62	0.0184	0.25		0.13
NOV 19,83	NOV 18,83	42.0	******	******		5.12	0.0262	0.90		0.24
NOV 20,83	NOV 19,83	1270.0	16.5	******		4.57	0.0438	1.40		0.26
NOV 21,83	NOV 20,83	443.0	10.5	******		4.75	0.0342	0.95		0.08
NOV 24,83	NOV 23,83	19.0	******	******	U	7.38	0.0144	******		******
NOV 29,83	NOV 28,83	443.0	5.5	******		5.38	0.0212	0.35		0.07
DEC 11,83	DEC 10,83	110.0	******	******		5.34	0.0228	******		******
DEC 14,83	DEC 13,83	******	******	******		******	******	******		******

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : FERNBERG/DAILY/AEROCHEM #16

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L		CHLORIDE MG/L		MAGNESIM MG/L		POTASSIM MG/L		SODIUM MG/L		AMMONIUM AS N MG/L		FREE H+ LAB MG/L	
AUG 11,83	AUG 10,83	******		******		******		******		******		******		******	
AUG 14,83	AUG 13,83	0.51		0.07		0.075		0.055	<T	0.010		0.690	G	0.0002	
AUG 20,83	AUG 19,83	0.28		0.03		0.045		0.035	<T	0.005		0.520	G	0.0002	
AUG 21,83	AUG 20,83	0.59		0.08		0.085		0.045		0.040		0.520	G	0.0001	
AUG 24,83	AUG 23,83	0.06		0.06		0.010		0.050		0.060		0.194		0.0043	
AUG 25,83	AUG 24,83	0.11		0.04		0.010		0.060		0.040		0.340		0.0015	
AUG 27,83	AUG 26,83	0.13		0.05		0.015		0.035		0.030		0.236		0.0083	
AUG 30,83	AUG 29,83	0.19		0.11		0.030		0.065	U	0.100		0.670	G	0.0006	
SEP 4,83	SEP 3,83	0.43		0.08		0.050		0.065		0.020		0.490		0.0117	
SEP 5,83	SEP 4,83	0.14		0.04		0.020		0.025		0.020		0.210	G	0.0004	
SEP 6,83	SEP 5,83	0.07		0.03		0.010	<T	0.010	<T	0.005		0.148		0.0026	
SEP 9,83	SEP 8,83	0.26	<W	0.01		0.040		0.035		0.045		0.300	G	0.0004	
SEP 10,83	SEP 9,83	0.11	<W	0.01		0.010	<T	0.010		0.015		0.172		0.0048	
SEP 15,83	SEP 14,83	0.10		0.06		0.015		0.050		0.045		0.128		0.0170	
SEP 16,83	SEP 15,83	0.04	<W	0.01		0.005		0.025	<T	0.010		0.136		0.0186	
SEP 18,83	SEP 17,83	0.22		0.03		0.025		0.035	<T	0.010		0.510		0.0224	
SEP 23,83	SEP 22,83	0.03	<W	0.01		0.005		0.020		0.030		0.234		0.0011	
SEP 29,83	SEP 28,83	0.15		0.14		0.020		0.070	D	0.040	D	0.360		0.0038	
SEP 30,83	SEP 29,83	0.23	<W	0.01		0.030		0.125		0.075	U	0.600	U	0.0003	
OCT 1,83	SEP 30,83	0.42		0.09		0.035		0.055		0.110		0.356		0.0044	
OCT 3,83	OCT 2,83	0.16		0.15		0.015		0.050		0.045		0.348		0.0018	
OCT 4,83	OCT 3,83	******		******		******		******		******		******		******	
OCT 5,83	OCT 4,83	0.09	<W	0.01		0.015		0.035		0.030		0.220		0.0017	
OCT 6,83	OCT 5,83	******		******		******		******		******		******		******	
OCT 8,83	OCT 7,83	0.07		0.07		0.010		0.025		0.025		0.112		0.0029	
OCT 11,83	OCT 10,83	0.06	<W	0.01		0.015		0.030		0.025		0.170		0.0162	
OCT 14,83	OCT 13,83	0.05	<W	0.01		0.010	<T	0.015		0.015		0.010		0.0037	
OCT 16,83	OCT 15,83	0.09	<W	0.01		0.015		0.060		0.020		0.090		0.0087	
NOV 10,83	NOV 9,83	******		0.15		******		******		******		******		0.0024	
NOV 19,83	NOV 18,83	******	U	0.46		******		******		******		******		0.0076	
NOV 20,83	NOV 19,83	0.15		0.07		0.015	<T	0.010		0.025		0.080		0.0269	
NOV 21,83	NOV 20,83	0.06		0.05		0.010		0.025		0.030		0.024		0.0178	
NOV 24,83	NOV 23,83	******		******		******		******		******		******	U	0.0000	
NOV 29,83	NOV 28,83	0.08		0.10		0.015		0.020		0.055		******		0.0042	
DEC 11,83	DEC 10,83	******		******		******		******		******		******		0.0046	
DEC 14,83	DEC 13,83	******		******		******		******		******		******		******	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : FORBES TWSP/DAILY/AEROCHEM #13

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
JAN 16,83	JAN 15,83	830	800	300	800	2	0.3	2	33707	2	1	****	E	
JAN 24,83	JAN 23,83	900	900	1000	1600	2	0.5	2	33709	2	1	56	D	
FEB 12,83	FEB 11,83	830	830	830	300	2	2.1	2	33717	2	1	175	C	N
FEB 28,83	FEB 27,83	830	****	830	830	3	6.8	2	33725	2	1	68	D	
MAR 2,83	MAR 1,83	830	830	1200	830	2	0.5	2	33730	2	1	****	KEI	
MAR 3,83	MAR 2,83	830	830	1200	830	2	0.6	2	33732	2	1	****	EIK	
MAR 5,83	MAR 4,83	830	830	830	830	1	0.3	2	33735	2	1	****	E	
MAR 6,83	MAR 5,83	830	830	830	830	1	0.4	2	33737	2	1	202	D	N
MAR 7,83	MAR 6,83	830	830	1500	830	1	6.3	2	33739	2	1	95	D	
MAR 8,83	MAR 7,83	830	830	830	830	1	1.1	2	33741	2	1	127	D	N
MAR 9,83	MAR 8,83	830	830	1600	830	2	1.1	2	33743	2	1	U 22	FL	
MAR 14,83	MAR 13,83	830	830	1500	730	3	0.9	2	33745	2	1	98	D	
MAR 17,83	MAR 16,83	830	830	830	1300	3	0.4	2	33747	2	1	15	E	N
MAR 18,83	MAR 17,83	830	830	1500	2400	2	2.3	2	33749	2	1	****	IK	
MAR 31,83	MAR 30,83	830	830	830	300	3	1.0	2	33751	2	1	62	C	
APR 1,83	MAR 31,83	830	830	300	830	1	3.3	2	33754	2	1	****	E	
APR 2,83	APR 1,83	830	830	830	1200	3	0.3	2	33755	2	1	119		
APR 11,83	APR 10,83	830	830	1100	1930	3	7.2	2	33758	2	1	96	CD	
APR 13,83	APR 12,83	830	830	300	830	2	1.5	2	33759	2	1	12	D	N
APR 14,83	APR 13,83	830	830	830	830	2	9.7	2	33761	2	1	51	D	
APR 25,83	APR 24,83	800	800	1630	2400	1	3.0	1	33765	2	1	100	D	HM
APR 29,83	APR 28,83	800	800	2030	800	3	2.0	1	33766	2	1	91	D	H
MAY 4,83	MAY 3,83	830	830	2200	700	3	5.0	1	33767	2	1	101	D	
MAY 13,83	MAY 12,83	830	830	2400	800	1	0.6	1	33768	2	1	38	D	N
MAY 19,83	MAY 18,83	800	800	1400	1530	1	1.0	1	33771	2	1	65	CD	
MAY 20,83	MAY 19,83	800	800	1730	1900	1	0.2	1	33772	2	1	31	DE	N
MAY 21,83	MAY 20,83	800	800	1730	2200	1	3.8	1	33773	2	1	96	D	HM
MAY 22,83	MAY 21,83	800	800	300	600	1	0.3	1	33774	2	1	36	DE	N
MAY 23,83	MAY 22,83	800	800	1300	1900	1	5.8	1	33775	2	1	98	CD	
MAY 24,83	MAY 23,83	800	830	300	830	1	2.0	1	33776	2	1	96	CD	H
MAY 28,83	MAY 27,83	800	800	300	600	1	0.1	1	33787	2	1	****	EK	
MAY 29,83	MAY 28,83	800	800	900	700	1	27.2	1	33788	2	1	104	D	C
MAY 30,83	MAY 29,83	800	830	900	1130	1	1.3	1	33789	2	1	64	D	
MAY 31,83	MAY 30,83	830	800	830	2100	1	1.2	1	33790	2	1	63	CD	
JUN 3,83	JUN 2,83	800	800	1530	1630	1	1.6	1	33791	2	1	86	CD	
JUN 4,83	JUN 3,83	800	930	2300	930	1	17.2	1	33792	2	1	100	D	
JUN 5,83	JUN 4,83	930	930	930	1800	1	11.0	1	33793	2	1	93	D	M
JUN 6,83	JUN 5,83	930	900	1100	1130	1	0.7	1	33794	2	1	80	D	
JUN 9,83	JUN 8,83	830	830	1800	1930	1	2.4	1	33807	2	1	94	D	H
JUN 11,83	JUN 10,83	830	830	2030	2100	1	0.2	1	33809	2	1	****	EK	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : FORBES TWSP/DAILY/AEROCHEM #13 PAGE : 2

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
JAN 16,83	JAN 15,83	******	******	******	******	******	******	******
JAN 24,83	JAN 23,83	18.0	******	******	4.47	0.0604	******	******
FEB 12,83	FEB 11,83	236.0	12.4	******	4.46	0.0592	0.70	0.24
FEB 28,83	FEB 27,83	300.0	26.0	******	4.45	0.0638	2.85	0.70
MAR 2,83	MAR 1,83	******	******	******	******	******	******	******
MAR 3,83	MAR 2,83	******	******	******	******	******	******	******
MAR 5,83	MAR 4,83	******	******	******	******	******	******	******
MAR 6,83	MAR 5,83	52.0	******	******	******	******	U 20.00	U 3.40
MAR 7,83	MAR 6,83	387.0	35.6	******	4.19	0.0966	3.35	0.47
MAR 8,83	MAR 7,83	90.0	G 48.2	******	3.98	G 0.1434	3.50	0.50
MAR 9,83	MAR 8,83	16.0	******	******	******	******	******	******
MAR 14,83	MAR 13,83	57.0	******	******	4.74	0.0458	3.40	0.68
MAR 17,83	MAR 16,83	4.0	******	******	******	******	******	******
MAR 18,83	MAR 17,83	******	******	******	******	******	******	******
MAR 31,83	MAR 30,83	40.0	******	******	******	******	4.25	0.81
APR 1,83	MAR 31,83	******	******	******	******	******	******	******
APR 2,83	APR 1,83	23.0	******	******	******	******	7.50	G 1.32
APR 11,83	APR 10,83	446.0	9.4	******	4.83	0.0300	0.75	0.08
APR 13,83	APR 12,83	12.0	******	******	4.13	******	******	******
APR 14,83	APR 13,83	322.0	15.2	******	4.59	0.0530	1.25	0.10
APR 25,83	APR 24,83	194.0	29.1	******	U 6.12	0.0304	4.65	0.71
APR 29,83	APR 28,83	117.0	******	******	5.66	0.0240	1.05	0.18
MAY 4,83	MAY 3,83	324.0	6.9	******	5.18	0.0282	0.75	0.11
MAY 13,83	MAY 12,83	15.0	******	******	******	******	******	******
MAY 19,83	MAY 18,83	42.0	******	******	5.26	0.0388	4.45	G 0.92
MAY 20,83	MAY 19,83	4.0	******	******	******	******	******	******
MAY 21,83	MAY 20,83	235.0	10.6	******	4.80	0.0380	1.00	0.10
MAY 22,83	MAY 21,83	7.0	******	******	******	******	******	******
MAY 23,83	MAY 22,83	366.0	8.0	******	5.22	0.0282	0.65	0.21
MAY 24,83	MAY 23,83	124.0	******	******	5.44	0.0232	0.90	0.13
MAY 28,83	MAY 27,83	******	******	******	******	******	******	******
MAY 29,83	MAY 28,83	1818.0	11.0	******	5.10	0.0332	1.15	0.10
MAY 30,83	MAY 29,83	54.0	******	******	******	******	2.60	0.18
MAY 31,83	MAY 30,83	49.0	******	******	U 7.14	0.0164	4.60	G 0.83
JUN 3,83	JUN 2,83	89.0	******	******	U 6.98	0.0308	1.15	0.16
JUN 4,83	JUN 3,83	1108.0	9.8	******	4.86	0.0350	1.15	0.17
JUN 5,83	JUN 4,83	657.0	5.5	******	5.06	0.0260	0.60	0.07
JUN 6,83	JUN 5,83	36.0	******	******	5.70	0.0202	0.45	0.04
JUN 9,83	JUN 8,83	145.0	******	******	5.53	0.0246	1.70	0.29
JUN 11,83	JUN 10,83	******	******	******	******	******	******	******

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : FORBES TWSP/DAILY/AEROCHEM #13 PAGE : 3

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
JAN 16,83	JAN 15,83	******	******	******	******	******	******	******
JAN 24,83	JAN 23,83	******	******	******	******	******	******	0.0339
FEB 12,83	FEB 11,83	0.03	0.08	<W 0.005	0.015	0.030	0.090	0.0347
FEB 28,83	FEB 27,83	0.20	0.09	0.015	0.025	0.060	0.980	0.0355
MAR 2,83	MAR 1,83	******	******	******	******	******	******	******
MAR 3,83	MAR 2,83	******	******	******	******	******	******	******
MAR 5,83	MAR 4,83	******	******	******	******	******	******	******
MAR 6,83	MAR 5,83	******	U 0.88	******	******	******	******	******
MAR 7,83	MAR 6,83	0.15	0.06	0.010	0.025	0.040	0.430	0.0646
MAR 8,83	MAR 7,83	0.07	0.07	<T 0.005	0.035	0.060	******	0.1047
MAR 9,83	MAR 8,83	******	******	******	******	******	******	******
MAR 14,83	MAR 13,83	******	0.15	******	******	******	1.090	0.0182
MAR 17,83	MAR 16,83	******	******	******	******	******	******	******
MAR 18,83	MAR 17,83	******	******	******	******	******	******	******
MAR 31,83	MAR 30,83	******	0.17	******	0.080	******	******	******
APR 1,83	MAR 31,83	******	******	******	******	******	******	******
APR 2,83	APR 1,83	******	0.25	******	******	******	******	******
APR 11,83	APR 10,83	0.05	0.03	0.010	0.030	0.030	<T 0.020	0.0148
APR 13,83	APR 12,83	******	******	******	******	******	******	0.0741
APR 14,83	APR 13,83	0.06	<W 0.01	0.010	0.020	0.010	0.048	0.0257
APR 25,83	APR 24,83	U 2.01	0.13	U 0.180	U 0.155	U 0.130	1.550	U 0.0008
APR 29,83	APR 28,83	0.17	0.02	0.030	0.035	0.020	0.400	0.0022
MAY 4,83	MAY 3,83	0.13	0.02	0.025	0.040	0.020	0.144	0.0066
MAY 13,83	MAY 12,83	******	******	******	******	******	******	******
MAY 19,83	MAY 18,83	******	0.11	******	******	******	0.284	0.0055
MAY 20,83	MAY 19,83	******	******	******	******	******	******	******
MAY 21,83	MAY 20,83	0.09	0.04	0.015	0.045	0.080	0.284	0.0158
MAY 22,83	MAY 21,83	******	******	******	******	******	******	******
MAY 23,83	MAY 22,83	0.09	0.03	0.015	0.025	0.010	0.236	0.0060
MAY 24,83	MAY 23,83	0.17	<W 0.01	0.030	0.035	0.025	0.230	0.0036
MAY 28,83	MAY 27,83	******	******	******	******	******	******	******
MAY 29,83	MAY 28,83	0.08	0.02	0.020	0.030	0.020	0.178	0.0079
MAY 30,83	MAY 29,83	******	0.10	******	0.040	0.055	******	******
MAY 31,83	MAY 30,83	******	0.20	******	******	******	******	U 0.0001
JUN 3,83	JUN 2,83	******	0.04	******	******	******	******	U 0.0001
JUN 4,83	JUN 3,83	0.07	0.04	0.020	0.020	0.020	0.250	0.0138
JUN 5,83	JUN 4,83	<T 0.02	0.02	<W 0.005	<T 0.010	<T 0.010	0.060	0.0087
JUN 6,83	JUN 5,83	******	0.12	******	******	******	******	0.0020
JUN 9,83	JUN 8,83	0.48	0.07	0.100	0.080	0.040	0.440	0.0030
JUN 11,83	JUN 10,83	******	******	******	******	******	******	******

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : FORBES TWSP/DAILY/AEROCHEM #13 PAGE : 4

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES		SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
JUN 15,83	JUN 14,83	830	830	1615	1830	1	3.2	1	33818	2	1		97	CD	
JUN 16,83	JUN 15,83	830	830	1730	2000	1	11.0	1	33819	2	1		101	CD	H
JUN 17,83	JUN 16,83	830	830	1900	1920	1	0.2	1	33820	2	1		****	EK	
JUN 23,83	JUN 22,83	830	830	845	930	1	9.4	1	33821	2	1		107	D	
JUN 26,83	JUN 25,83	830	830	900	300	1	22.0	1	33822	2	1		95	CD	
JUN 27,83	JUN 26,83	830	830	1500	1530	1	4.0	1	33823	2	1	U	77	CDFJ	
JUN 30,83	JUN 29,83	830	830	300	****	1	5.6	1	33825	2	1		89	D	
JUL 1,83	JUN 30,83	830	830	1800	1900	1	3.6	1	33826	2	1		90	D	
JUL 3,83	JUL 2,83	830	830	300	****	1	25.0	1	33827	2	1		158	D	N
JUL 5,83	JUL 3,83	830	2030	600	1200	1	33.0	1	33831	2	1	U	19	DH	NHCMZ
JUL 8,83	JUL 7,83	830	830	1715	1900	1	2.4	1	33832	2	1		39	CD	N
JUL 17,83	JUL 16,83	830	830	1800	1930	1	9.0	1	33835	2	1	U	106	DJ	
JUL 19,83	JUL 18,83	830	830	1945	300	1	2.4	1	33837	2	1		87		
JUL 20,83	JUL 19,83	830	830	2100	830	1	0.3	1	33838	2	1		****	EK	
JUL 24,83	JUL 23,83	830	830	1300	2000	1	2.2	1	33839	2	1		83	C	
JUL 28,83	JUL 27,83	830	830	1830	2000	1	48.6	1	33848	2	1	U	104	ADJ	
JUL 29,83	JUL 28,83	830	830	1650	1720	1	0.8	1	33849	2	1	U	44	DJ	
JUL 31,83	JUL 30,83	830	830	1900	2030	1	2.8	1	33850	2	1		70	CD	
AUG 1,83	JUL 31,83	830	830	1400	2000	1	6.8	1	33851	2	1		79	CD	C
AUG 3,83	AUG 2,83	830	830	1900	300	1	31.0	1	33852	2	1	U	105	CDJ	H
AUG 8,83	AUG 7,83	830	830	2145	2300	1	5.0	1	33853	2	1		98	CD	
AUG 11,83	AUG 10,83	830	830	1045	300	1	13.2	1	33862	2	1		99	C	HCM
AUG 21,83	AUG 20,83	830	830	500	830	1	4.0	1	33863	2	1		86	C	
AUG 22,83	AUG 21,83	830	900	830	1030	1	4.3	1	33864	2	1		93		H
AUG 24,83	AUG 23,83	830	830	130	430	1	1.8	1	33865	2	1		77	C	
AUG 27,83	AUG 26,83	830	830	2400	130	1	0.6	1	33866	2	1		****	KE	
AUG 28,83	AUG 27,83	830	830	2230	2400	1	0.4	1	33867	2	1		****	KE	
AUG 30,83	AUG 29,83	830	830	1330	1500	1	19.6	1	33869	2	1	U	107	J	HCM
SEP 6,83	SEP 4,83	830	1000	2000	2400	1	4.7	1	33870	2	1		71		HMZ
SEP 8,83	SEP 7,83	1100	1108	****	****	1	0.4	1	33871	2	1		****	E	
SEP 9,83	SEP 8,83	1108	905	****	****	1	****	*	33872	2	1		****		H
SEP 10,83	SEP 9,83	905	905	500	905	1	3.1	1	33873	2	1		68	CD	
SEP 11,83	SEP 10,83	905	800	905	1200	1	11.7	1	33874	2	1		91	CD	HM
SEP 14,83	SEP 13,83	830	830	1130	1730	1	4.7	1	33875	2	1		85		HM
SEP 16,83	SEP 15,83	830	830	2200	730	1	7.6	1	33876	2	1		90		M
SEP 18,83	SEP 17,83	830	830	2145	2400	1	9.8	1	33877	2	1		98	CD	
SEP 21,83	SEP 20,83	830	830	1145	1800	1	0.6	1	33878	2	1		44	C	N
SEP 22,83	SEP 21,83	830	830	900	1400	1	1.3	1	33879	2	1		82		
SEP 28,83	SEP 27,83	830	830	2100	****	1	0.2	1	33888	2	1		****	E	
SEP 29,83	SEP 28,83	830	830	1900	830	1	7.8	1	33889	2	1		92		H

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : FORBES TWSP/DAILY/AEROCHEM #13

REMOVAL DATE	EXPOSURE DATE	VOLUME ML		CONDUCT. UMHO/CM	PH FIELD		PH LAB		TOTAL H+ TO PH8.3 MG/L		SULPHATE MG/L		NITRATE AS N MG/L	
JUN 15,83	JUN 14,83	200.0	U	61.0	******	U	3.95	G	0.1506	U	6.70		0.20	
JUN 16,83	JUN 15,83	714.0		5.4	******		5.34		0.0216		0.55		0.09	
JUN 17,83	JUN 16,83	******		******	******		******		******		******		******	
JUN 23,83	JUN 22,83	646.0		23.5	******		4.51	G	1.6580		3.50		0.28	
JUN 26,83	JUN 25,83	1352.0		22.3	******		4.55		0.0516		3.25		0.31	
JUN 27,83	JUN 26,83	199.0		5.9	******		5.03		0.0290		0.45		0.01	
JUN 30,83	JUN 29,83	323.0		24.0	******		******		******		1.85		0.28	
JUL 1,83	JUN 30,83	210.0		4.8	******		5.19		0.0228		0.35		0.07	
JUL 3,83	JUL 2,83	2543.0		6.8	******		5.10		0.0258		0.65		0.12	
JUL 5,83	JUL 3,83	418.0		3.4	******		5.87		0.0168		0.25		0.07	
JUL 8,83	JUL 7,83	61.0		******	******	U	6.89		0.0262	U	5.45	U	1.58	
JUL 17,83	JUL 16,83	613.0		8.0	******		5.07		0.0270		0.85		0.13	
JUL 19,83	JUL 18,83	134.0		17.8	******		4.59		0.0506		1.05		0.44	
JUL 20,83	JUL 19,83	******		******	******		******		******		******		******	
JUL 24,83	JUL 23,83	118.0		2.4	******		5.71		0.0200	<W	0.05	<W	0.01	
JUL 28,83	JUL 27,83	3269.0		12.7	******		4.80		0.0370		1.50		0.10	
JUL 29,83	JUL 28,83	23.0		******	******		4.57		******		******		******	
JUL 31,83	JUL 30,83	127.0		******	******		4.76		0.0402		1.10		0.19	
AUG 1,83	JUL 31,83	347.0		4.1	******		5.26		0.0228	<W	0.05		0.06	
AUG 3,83	AUG 2,83	2093.0		12.6	******		4.99		0.0304		1.70		0.26	
AUG 8,83	AUG 7,83	316.0		8.7	******	U	6.97		0.0170		0.90		0.20	
AUG 11,83	AUG 10,83	845.0		6.6	******		5.06		0.0264		0.25	<W	0.01	
AUG 21,83	AUG 20,83	223.0		18.5	******		4.65		0.0438		2.20		0.36	
AUG 22,83	AUG 21,83	257.0		11.9	******		4.84		0.0352		1.30		0.14	
AUG 24,83	AUG 23,83	89.0		8.4	******		******		******		0.40		0.10	
AUG 27,83	AUG 26,83	******		******	******		******		******		******		******	
AUG 28,83	AUG 27,83	******		******	******		******		******		******		******	
AUG 30,83	AUG 29,83	1350.0		5.4	******		5.32		0.0246		0.25		0.09	
SEP 6,83	SEP 4,83	215.0		8.6	******		5.10		0.0276		0.75		0.17	
SEP 8,83	SEP 7,83	******		******	******		******		******		******		******	
SEP 9,83	SEP 8,83	799.0		7.1	******	D	5.50	B	0.6040		1.10		0.20	
SEP 10,83	SEP 9,83	136.0	U	19.6	******	U	4.74	U	0.0446	U	2.75	U	0.59	
SEP 11,83	SEP 10,83	689.0		4.1	******		5.44		0.0210		0.30		0.06	
SEP 14,83	SEP 13,83	257.0		5.0	******		5.09		0.0274		0.40	<W	0.01	
SEP 16,83	SEP 15,83	443.0		9.1	******		4.76		0.0352		0.75		0.03	
SEP 18,83	SEP 17,83	617.0	G	32.6	******	D	4.28	G	0.0816		3.80		0.47	
SEP 21,83	SEP 20,83	17.0		******	******		******		******		******		******	
SEP 22,83	SEP 21,83	69.0		******	******		5.03		0.0274		******		******	
SEP 28,83	SEP 27,83	******		******	******		******		******		******		******	
SEP 29,83	SEP 28,83	461.0		17.5	******		5.20		0.0292		2.90		0.49	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : FORBES TWSP/DAILY/AEROCHEM #13

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
JUN 15,83	JUN 14,83	0.40	U 0.37	0.090	U 0.215	U 0.165	0.510	U 0.1122
JUN 16,83	JUN 15,83	0.08	<T 0.01	0.020	0.075	<T 0.010	0.154	0.0046
JUN 17,83	JUN 16,83	******	******	******	******	******	******	******
JUN 23,83	JUN 22,83	0.25	0.07	0.030	0.060	0.025	0.700	0.0309
JUN 26,83	JUN 25,83	0.31	0.09	0.030	0.045	0.025	0.600	0.0282
JUN 27,83	JUN 26,83	0.07	0.12	0.015	0.035	0.015	0.040	0.0093
JUN 30,83	JUN 29,83	******	0.14	******	******	******	0.172	******
JUL 1,83	JUN 30,83	0.04	0.12	0.005	<T 0.010	<T 0.010	0.060	0.0065
JUL 3,83	JUL 2,83	0.09	0.14	0.015	0.020	0.030	0.142	0.0079
JUL 5,83	JUL 3,83	0.07	0.12	0.010	0.015	0.015	0.060	0.0013
JUL 8,83	JUL 7,83	******	U 0.62	******	******	******	******	U 0.0001
JUL 17,83	JUL 16,83	0.13	<W 0.01	0.015	0.020	0.015	0.154	0.0085
JUL 19,83	JUL 18,83	0.09	0.07	0.015	0.035	0.040	0.230	0.0257
JUL 20,83	JUL 19,83	******	******	******	******	******	******	******
JUL 24,83	JUL 23,83	******	0.02	******	******	******	<W 0.002	0.0019
JUL 28,83	JUL 27,83	0.10	<W 0.01	0.020	0.025	<T 0.005	0.300	0.0158
JUL 29,83	JUL 28,83	******	******	******	******	******	******	0.0269
JUL 31,83	JUL 30,83	0.29	0.06	0.075	0.070	0.030	******	0.0174
AUG 1,83	JUL 31,83	<W 0.01	<W 0.01	<W 0.005	0.025	<W 0.005	0.010	0.0055
AUG 3,83	AUG 2,83	0.29	0.03	0.050	0.035	0.015	0.470	0.0102
AUG 8,83	AUG 7,83	0.58	0.04	0.130	0.090	0.020	0.330	U 0.0001
AUG 11,83	AUG 10,83	0.03	<W 0.01	0.005	<T 0.010	0.015	0.044	0.0087
AUG 21,83	AUG 20,83	0.46	0.11	0.045	0.040	0.075	0.348	0.0224
AUG 22,83	AUG 21,83	0.21	0.06	0.020	0.075	0.115	0.220	0.0145
AUG 24,83	AUG 23,83	0.14	<T 0.01	0.015	0.015	0.020	0.074	******
AUG 27,83	AUG 26,83	******	******	******	******	******	******	******
AUG 28,83	AUG 27,83	******	******	******	******	******	******	******
AUG 30,83	AUG 29,83	0.06	<W 0.01	0.010	0.025	<W 0.005	0.166	0.0048
SEP 6,83	SEP 4,83	0.31	0.05	0.050	0.090	0.040	0.146	0.0079
SEP 8,83	SEP 7,83	******	******	******	******	******	******	******
SEP 9,83	SEP 8,83	0.33	0.06	0.050	0.050	0.070	0.320	D 0.0032
SEP 10,83	SEP 9,83	U 0.59	U 0.26	U 0.055	U 0.155	U 0.245	U 0.570	U 0.0182
SEP 11,83	SEP 10,83	0.09	0.02	<W 0.005	0.055	0.055	0.124	0.0036
SEP 14,83	SEP 13,83	0.04	<W 0.01	<W 0.005	0.015	<T 0.005	0.124	0.0081
SEP 16,83	SEP 15,83	0.05	<W 0.01	<W 0.005	0.020	<T 0.010	0.068	0.0174
SEP 18,83	SEP 17,83	0.28	0.06	0.015	0.050	0.035	0.540	D 0.0525
SEP 21,83	SEP 20,83	******	******	******	******	******	******	******
SEP 22,83	SEP 21,83	0.06	******	0.010	<T 0.005	0.060	0.062	0.0093
SEP 28,83	SEP 27,83	******	******	******	******	******	******	******
SEP 29,83	SEP 28,83	0.53	0.08	0.070	0.080	G 0.185	0.760	0.0063

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : FORBES TWSP/DAILY/AEROCHEM #13

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES		SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
SEP 30,83	SEP 29,83	830	830	830	1230	1	33.8	1	33890	2	1		99		C
OCT 1,83	SEP 30,83	830	830	900	1100	1	3.2	1	33891	2	1		69	C	
OCT 2,83	OCT 1,83	830	830	2200	200	1	2.2	1	33893	2	1		86	C	
OCT 3,83	OCT 2,83	830	830	2030	2400	1	8.2	1	33895	2	1		99	C	HCM
OCT 8,83	OCT 7,83	830	830	900	1100	1	3.6	1	33897	2	1		70		C
OCT 11,83	OCT 10,83	830	830	1700	830	1	20.4	1	33899	2	1		101	C	
OCT 12,83	OCT 11,83	830	830	830	1100	1	2.1	1	33903	2	1		138	C	N
OCT 13,83	OCT 12,83	830	830	830	1500	1	6.1	1	33905	2	1		73	C	CM
OCT 14,83	OCT 13,83	830	830	2230	750	3	2.0	1	33907	2	1	U	627	CP	NCM
OCT 16,83	OCT 15,83	830	830	1930	200	1	14.0	1	33909	2	1		68	C	
OCT 17,83	OCT 16,83	830	830	830	830	1	2.0	1	33911	2	1		67	C	
NOV 3,83	NOV 2,83	830	830	930	1030	3	0.2	2	33922	2	1		****	E	
NOV 10,83	NOV 9,83	830	830	1000	1900	2	3.5	2	33918	2	1		****	K	
NOV 14,83	NOV 13,83	830	830	1030	1800	2	1.8	2	33920	2	1		58		
NOV 18,83	NOV 17,83	830	830	300	600	2	0.2	2	33925	2	1		****	KF	
NOV 21,83	NOV 19,83	830	830	1700	830	3	33.4	2	33926	2	1		90	C	Y2
NOV 22,83	NOV 21,83	830	830	830	1400	2	0.6	2	33930	2	1	U	62	J	
NOV 23,83	NOV 22,83	830	830	2100	830	2	5.2	2	33933	2	1		****	FK	
NOV 24,83	NOV 23,83	830	830	830	830	3	28.0	2	33934	2	1		48	C	N
NOV 29,83	NOV 28,83	830	830	830	2200	3	11.6	2	33939	2	1		****	FK	
NOV 30,83	NOV 29,83	830	830	830	830	2	2.0	2	33940	2	1		****	E	
DEC 1,83	NOV 30,83	830	930	830	830	2	0.3	2	33942	2	1		****	E	
DEC 11,83	DEC 10,83	830	830	****	****	2	5.9	2	33946	2	1		****	FK	
DEC 12,83	DEC 11,83	830	830	830	1800	2	8.4	2	33948	2	1		****	FK	
DEC 14,83	DEC 13,83	830	830	1100	1800	2	4.0	2	33960	2	1		****	E	
DEC 29,83	DEC 28,83	830	830	900	1100	2	0.2	2	33949	2	1		****	E	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : FORBES TWSP/DAILY/AEROCHEM #13

REMOVAL DATE	EXPOSURE DATE	VOLUME ML		CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L		SULPHATE MG/L		NITRATE AS N MG/L	
SEP 30,83	SEP 29,83	2166.0		5.1	******	5.63	0.0180		0.60		0.07	
OCT 1,83	SEP 30,83	142.0	G	27.2	******	4.42	0.0662		3.15		0.43	
OCT 2,83	OCT 1,83	122.0		8.7	******	5.08	0.0290		0.80		0.20	
OCT 3,83	OCT 2,83	524.0		4.5	******	5.60	0.0182		0.25		0.08	
OCT 8,83	OCT 7,83	162.0		7.2	******	5.09	0.0258		0.65		0.08	
OCT 11,83	OCT 10,83	1325.0		12.2	******	4.77	0.0362		1.10		0.17	
OCT 12,83	OCT 11,83	187.0		8.2	******	4.96	0.0284		0.55		0.13	
OCT 13,83	OCT 12,83	286.0		5.0	******	5.26	0.0208		0.30		0.06	
OCT 14,83	OCT 13,83	805.0		3.0	******	5.42	0.0182		0.25		0.02	
OCT 16,83	OCT 15,83	619.0		10.7	******	4.73	0.0356		1.00		0.11	
OCT 17,83	OCT 16,83	86.0		******	******	4.89	0.0342		1.40		0.30	
NOV 3,83	NOV 2,83	******		******	******	******	******		******		******	
NOV 10,83	NOV 9,83	******		******	******	******	******		******		******	
NOV 14,83	NOV 13,83	68.0		******	******	4.74	0.0360		1.45		0.23	
NOV 18,83	NOV 17,83	******		******	******	******	******		******		******	
NOV 21,83	NOV 19,83	1948.0		12.1	******	4.71	0.0362		0.90		0.15	
NOV 22,83	NOV 21,83	24.0		******	******	5.20	0.0244		******		******	
NOV 23,83	NOV 22,83	******		******	******	******	******		******		******	
NOV 24,83	NOV 23,83	876.0	D	12.5	******	4.66		D 0.0374		D 0.90		D 0.20
NOV 29,83	NOV 28,83	******		******	******	******	******		******		******	
NOV 30,83	NOV 29,83	******		******	******	******	******		******		******	
DEC 1,83	NOV 30,83	******		******	******	******	******		******		******	
DEC 11,83	DEC 10,83	******		******	******	******	******		******		******	
DEC 12,83	DEC 11,83	******		******	******	******	******		******		******	
DEC 14,83	DEC 13,83	******		******	******	******	******		******		******	
DEC 29,83	DEC 28,83	******		******	******	******	******		******		******	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : FORBES TWSP/DAILY/AEROCHEM #13

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
SEP 30,83	SEP 29,83	0.10	<W 0.01	0.015	0.060	0.060	0.136	0.0023
OCT 1,83	SEP 30,83	0.27	0.07	0.030	0.050	0.150	0.390	0.0380
OCT 2,83	OCT 1,83	0.28	0.06	0.030	0.035	0.095	0.060	0.0083
OCT 3,83	OCT 2,83	0.03	<W 0.01	<T 0.005	<T 0.010	<T 0.010	0.068	0.0025
OCT 8,83	OCT 7,83	0.06	<W 0.01	0.010	<T 0.015	0.035	0.060	0.0081
OCT 11,83	OCT 10,83	0.04	<W 0.01	0.005	<T 0.015	<T 0.005	0.138	0.0170
OCT 12,83	OCT 11,83	0.06	<W 0.01	0.010	<T 0.010	0.090	0.038	0.0110
OCT 13,83	OCT 12,83	0.03	<W 0.01	0.010	<T 0.005	0.020	<W 0.002	0.0055
OCT 14,83	OCT 13,83	<T 0.02	<W 0.01	<T 0.005	<W 0.005	0.015	<W 0.002	0.0038
OCT 16,83	OCT 15,83	0.06	<T 0.02	0.010	0.020	0.025	0.082	0.0186
OCT 17,83	OCT 16,83	0.12	<W 0.01	0.020	0.060	0.060	0.330	0.0129
NOV 3,83	NOV 2,83	******	******	******	******	******	******	******
NOV 10,83	NOV 9,83	******	******	******	******	******	******	******
NOV 14,83	NOV 13,83	******	0.18	******	******	******	******	0.0182
NOV 18,83	NOV 17,83	******	******	******	******	******	******	******
NOV 21,83	NOV 19,83	0.05	0.03	0.005	0.050	0.050	0.020	0.0195
NOV 22,83	NOV 21,83	******	******	******	******	******	******	0.0063
NOV 23,83	NOV 22,83	******	******	******	******	******	******	******
NOV 24,83	NOV 23,83	0.11	0.03	0.005	<W 0.005	<T 0.005	0.018	0.0219
NOV 29,83	NOV 28,83	******	******	******	******	******	******	******
NOV 30,83	NOV 29,83	******	******	******	******	******	******	******
DEC 1,83	NOV 30,83	******	******	******	******	******	******	******
DEC 11,83	DEC 10,83	******	******	******	******	******	******	******
DEC 12,83	DEC 11,83	******	******	******	******	******	******	******
DEC 14,83	DEC 13,83	******	******	******	******	******	******	******
DEC 29,83	DEC 28,83	******	******	******	******	******	******	******

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LAC LA CROIX/DAILY/AEROCHEM #15

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES		SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
JAN 3,83	DEC 24,82	900	900	****	****	2	18.5	2	32548	2	1		57	C	Y10
JAN 6,83	JAN 5,83	900	900	****	****	2	1.6	2	32549	2	1		47	D	N
JAN 10,83	JAN 8,83	900	900	****	****	2	0.7	2	32550	2	1		144	D	NY2
JAN 11,83	JAN 10,83	900	900	****	****	2	5.7	2	32551	2	1		62		
JAN 17,83	JAN 14,83	900	900	****	****	2	8.9	2	32552	2	1	U	95	DG	Y3
JAN 19,83	JAN 18,83	900	900	****	****	3	0.5	2	32553	2	1		34		N
JAN 30,83	JAN 29,83	900	900	****	****	3	5.0	2	32554	2	1		54	C	
FEB 11,83	FEB 10,83	900	900	****	****	2	0.8	2	32555	2	1		113	D	
FEB 15,83	FEB 14,83	900	900	****	****	1	1.1	2	32556	2	1		21	D	N
FEB 18,83	FEB 17,83	900	900	****	****	3	3.3	2	32557	2	1		143	D	NHCM
FEB 20,83	FEB 18,83	900	900	900	900	3	17.1	2	32558	2	1		74	D	HCMY2
FEB 27,83	FEB 26,83	900	900	****	****	3	5.2	2	32559	2	1		101	D	
MAR 2,83	MAR 1,83	900	900	****	****	2	0.5	2	32560	2	1		****	E	
MAR 12,83	MAR 11,83	900	900	****	****	3	1.3	2	32561	2	1	U	150	DGH	
MAR 18,83	MAR 17,83	900	900	****	****	3	0.7	2	32562	2	1		****	E	
MAR 26,83	MAR 25,83	900	900	****	****	2	1.0	2	32563	2	1		****	E	
APR 1,83	MAR 31,83	900	900	****	****	3	****	2	32564	2	1		****	C	
APR 2,83	APR 1,83	900	900	****	****	3	****	2	32565	2	1		****	C	
APR 13,83	APR 12,83	900	900	****	****	3	12.6	2	32566	2	1		10	C	N
APR 14,83	APR 13,83	900	900	****	****	2	5.7	2	32567	2	1		56	CD	
APR 16,83	APR 15,83	900	900	****	****	2	6.3	2	32568	2	1		23	CD	NHM
APR 27,83	APR 26,83	900	900	****	****	1	1.3	2	32569	2	1	U	332	DP	N
APR 28,83	APR 27,83	900	900	****	****	1	****	2	32570	2	1		****	DG	H
MAY 13,83	MAY 12,83	900	900	****	****	1	5.3	2	32571	2	1		124	BD	N
MAY 16,83	MAY 15,83	900	900	****	****	1	****	2	32572	2	1		****	D	
MAY 21,83	MAY 20,83	900	900	****	****	1	****	2	32573	2	1		****	D	
MAY 28,83	MAY 27,83	900	900	****	****	1	17.6	2	32574	2	1		111	D	
MAY 29,83	MAY 28,83	900	900	****	****	1	2.2	2	32575	2	1		153	CD	N
MAY 30,83	MAY 29,83	900	900	****	****	1	0.1	2	32576	2	1		****	EK	
JUN 16,83	JUN 15,83	900	900	****	117	1	18.8	1	32578	2	1		97	CD	HCM
JUN 30,83	JUN 29,83	900	900	1700	2000	1	10.9	1	32585	2	1		133	DQ	N
JUL 4,83	JUL 2,83	900	900	****	****	1	34.0	1	32586	2	1		96	CD	Y2
JUL 5,83	JUL 4,83	900	900	****	****	1	3.5	1	32587	2	1		81	CD	CM
JUL 15,83	JUL 14,83	900	900	****	****	1	2.3	1	32588	2	1		65	CD	H
JUL 29,83	JUL 28,83	900	900	****	****	1	9.8	1	32589	2	1		50	D	
JUL 31,83	JUL 30,83	900	900	2000	300	1	33.6	1	32590	2	1		85	CD	
AUG 2,83	AUG 1,83	900	900	****	****	1	22.8	1	32591	2	1		92	CD	
AUG 8,83	AUG 7,83	900	900	****	****	1	1.5	1	32592	2	1		55	CD	
AUG 10,83	AUG 9,83	900	900	****	****	1	6.2	1	32593	2	1		88	CD	
AUG 18,83	AUG 17,83	900	900	****	****	1	9.8	1	32594	2	1		109	CD	H

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LAC LA CROIX/DAILY/AEROCHEM #15

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
JAN 3,83	DEC 24,82	678.0	18.6	******	4.37	0.0620	1.45	0.36
JAN 6,83	JAN 5,83	49.0	******	******	4.63	0.0508	1.45	0.58
JAN 10,83	JAN 8,83	65.0	******	******	5.44	0.0302	0.80	0.19
JAN 11,83	JAN 10,83	227.0	24.8	******	4.33	0.0770	1.85	0.62
JAN 17,83	JAN 14,83	545.0	4.9	******	5.04	0.0342	0.25	0.09
JAN 19,83	JAN 18,83	11.0	******	******	******	******	******	******
JAN 30,83	JAN 29,83	176.0	14.5	******	4.61	0.0498	1.20	0.38
FEB 11,83	FEB 10,83	58.0	******	******	******	******	0.95	1.09
FEB 15,83	FEB 14,83	15.0	******	******	******	******	******	******
FEB 18,83	FEB 17,83	304.0	3.5	******	U 7.32	0.0374	0.15	0.05
FEB 20,83	FEB 18,83	819.0	7.9	******	G 6.83	0.0210	0.70	0.17
FEB 27,83	FEB 26,83	338.0	26.7	******	5.23	0.0376	4.05	0.89
MAR 2,83	MAR 1,83	******	******	******	******	******	******	******
MAR 12,83	MAR 11,83	125.0	******	******	4.64	0.0472	3.35	0.45
MAR 18,83	MAR 17,83	******	******	******	******	******	******	******
MAR 26,83	MAR 25,83	******	******	******	******	******	******	******
APR 1,83	MAR 31,83	406.0	20.5	******	4.48	0.0542	2.00	0.32
APR 2,83	APR 1,83	437.0	15.9	******	4.58	0.0432	1.20	0.22
APR 13,83	APR 12,83	88.0	******	******	******	******	1.35	0.21
APR 14,83	APR 13,83	206.0	15.1	******	4.54	0.0524	1.30	0.13
APR 16,83	APR 15,83	95.0	******	******	5.47	G 0.1158	0.25	<W 0.01
APR 27,83	APR 26,83	277.0	13.6	******	U 6.91	0.0228	1.65	0.31
APR 28,83	APR 27,83	334.0	8.3	******	5.77	0.0226	1.40	0.21
MAY 13,83	MAY 12,83	424.0	20.1	******	4.69	0.0514	2.80	0.38
MAY 16,83	MAY 15,83	48.0	******	******	4.57	0.0600	3.80	G 0.98
MAY 21,83	MAY 20,83	248.0	10.9	******	4.82	0.0354	1.15	0.18
MAY 28,83	MAY 27,83	1258.0	11.4	******	5.11	0.0298	2.15	0.15
MAY 29,83	MAY 28,83	216.0	******	******	******	******	******	******
MAY 30,83	MAY 29,83	******	******	******	******	******	******	******
JUN 16,83	JUN 15,83	1179.0	2.4	******	5.57	0.0184	0.05	0.03
JUN 30,83	JUN 29,83	933.0	8.4	******	4.96	0.0290	0.80	0.11
JUL 4,83	JUL 2,83	2110.0	7.5	******	5.03	0.0264	0.40	0.17
JUL 5,83	JUL 4,83	183.0	2.3	******	5.63	0.0172	<W 0.05	<T 0.02
JUL 15,83	JUL 14,83	97.0	******	******	4.92	0.0376	2.50	0.40
JUL 29,83	JUL 28,83	318.0	18.7	******	4.61	0.0502	1.80	0.50
JUL 31,83	JUL 30,83	1840.0	8.4	******	5.01	0.0292	0.75	0.14
AUG 2,83	AUG 1,83	1359.0	7.4	******	5.11	0.0292	0.60	0.18
AUG 8,83	AUG 7,83	53.0	******	******	G 6.90	0.0164	0.95	0.30
AUG 10,83	AUG 9,83	353.0	D 10.3	******	4.90	0.0362	0.85	0.15
AUG 18,83	AUG 17,83	689.0	4.9	******	5.83	0.0204	0.55	0.11

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LAC LA CROIX/DAILY/AEROCHEM #15 PAGE : 3

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
JAN 3,83	DEC 24,82	0.06	0.08	0.005	<T 0.010	0.020	0.224	0.0427
JAN 6,83	JAN 5,83	******	0.16	******	******	******	******	0.0234
JAN 10,83	JAN 8,83	0.14	0.10	0.055	0.030	0.040	******	0.0036
JAN 11,83	JAN 10,83	<T 0.02	0.10	0.010	0.020	<T 0.010	0.540	0.0468
JAN 17,83	JAN 14,83	<T 0.01	0.05	0.010	0.015	0.020	0.010	0.0091
JAN 19,83	JAN 18,83	******	******	******	******	******	******	******
JAN 30,83	JAN 29,83	0.05	0.17	0.020	0.030	U 0.190	0.420	0.0245
FEB 11,83	FEB 10,83	******	0.14	******	******	******	0.048	******
FEB 15,83	FEB 14,83	******	******	******	******	******	******	******
FEB 18,83	FEB 17,83	0.04	0.03	<T 0.005	<W 0.005	0.010	0.028	U 0.0000
FEB 20,83	FEB 18,83	0.06	0.06	<T 0.005	0.020	0.030	0.198	G 0.0001
FEB 27,83	FEB 26,83	0.34	0.09	0.020	0.030	0.060	1.760	0.0059
MAR 2,83	MAR 1,83	******	******	******	******	******	******	******
MAR 12,83	MAR 11,83	U 0.52	0.14	0.050	0.010	0.070	0.640	0.0229
MAR 18,83	MAR 17,83	******	******	******	******	******	******	******
MAR 26,83	MAR 25,83	******	******	******	******	******	******	******
APR 1,83	MAR 31,83	0.08	0.19	0.020	U 0.120	U 0.150	0.262	0.0331
APR 2,83	APR 1,83	0.07	0.05	0.010	U 0.240	******	0.104	0.0263
APR 13,83	APR 12,83	0.22	0.16	0.025	0.055	0.065	0.044	******
APR 14,83	APR 13,83	0.10	0.05	0.015	0.030	0.030	0.016	0.0288
APR 16,83	APR 15,83	0.11	0.03	0.015	0.040	0.035	0.006	0.0034
APR 27,83	APR 26,83	U 0.77	0.05	U 0.100	0.045	0.035	0.830	U 0.0001
APR 28,83	APR 27,83	0.23	0.04	0.040	0.030	0.040	0.500	0.0017
MAY 13,83	MAY 12,83	0.60	0.08	0.105	0.060	0.050	0.360	0.0204
MAY 16,83	MAY 15,83	******	0.20	******	******	******	******	0.0269
MAY 21,83	MAY 20,83	0.12	0.08	0.030	0.060	0.045	0.166	0.0151
MAY 28,83	MAY 27,83	0.31	0.10	0.060	0.090	0.135	0.310	0.0078
MAY 29,83	MAY 28,83	******	******	******	******	******	******	******
MAY 30,83	MAY 29,83	******	******	******	******	******	******	******
JUN 16,83	JUN 15,83	<T 0.02	0.11	0.005	0.015	<T 0.010	<T 0.002	0.0027
JUN 30,83	JUN 29,83	0.08	<W 0.01	0.015	0.095	0.015	0.088	0.0110
JUL 4,83	JUL 2,83	0.07	<W 0.01	0.010	0.030	0.020	0.114	0.0093
JUL 5,83	JUL 4,83	0.03	<W 0.01	0.005	<T 0.010	0.015	0.018	0.0023
JUL 15,83	JUL 14,83	0.53	0.07	0.075	0.070	0.105	0.580	0.0120
JUL 29,83	JUL 28,83	0.25	0.10	0.025	0.045	0.040	0.480	0.0245
JUL 31,83	JUL 30,83	0.04	0.03	0.015	0.045	0.040	0.184	0.0098
AUG 2,83	AUG 1,83	0.10	0.02	0.025	0.040	<W 0.005	******	0.0078
AUG 8,83	AUG 7,83	******	0.14	******	******	******	D 0.222	G 0.0001
AUG 10,83	AUG 9,83	0.09	0.06	0.010	0.035	0.020	0.182	0.0126
AUG 18,83	AUG 17,83	0.19	0.03	0.025	0.030	<W 0.005	0.216	0.0015

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LAC LA CROIX/DAILY/AEROCHEM #15

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
AUG 19,83	AUG 18,83	900	900	****	****	1	3.7	1	32595	2	1	72	CD	
AUG 24,83	AUG 23,83	900	900	1400	1700	1	42.2	1	32596	2	1	103	CD	H
SEP 9,83	SEP 8,83	900	900	2300	****	1	38.1	1	32597	2	1	90	BCD	
SEP 10,83	SEP 9,83	900	900	****	****	1	8.8	1	32598	2	1	92		HM
SEP 13,83	SEP 12,83	900	900	****	****	1	3.2	1	32599	2	1	37	C	NM
SEP 16,83	SEP 15,83	900	900	****	****	1	12.0	1	32600	2	1	75		
SEP 20,83	SEP 19,83	900	900	****	****	1	10.3	1	32601	2	1	98		
OCT 5,83	OCT 4,83	900	900	****	****	1	6.6	1	32131	2	1	87	CD	
OCT 6,83	OCT 5,83	900	900	****	****	1	6.8	1	32132	2	1	85		HC
OCT 7,83	OCT 6,83	900	900	****	****	1	3.1	1	32133	2	1	61	CD	HCM
OCT 8,83	OCT 7,83	900	900	****	****	1	23.0	1	32134	2	1	81	C	
OCT 13,83	OCT 12,83	900	900	****	****	3	8.8	1	32135	2	1	79		HCM
OCT 16,83	OCT 15,83	900	900	****	****	3	14.8	1	32603	2	1	78	CD	
OCT 19,83	OCT 18,83	900	900	****	****	1	1.2	1	32604	2	1	****	E	
OCT 24,83	OCT 23,83	900	900	****	****	1	1.0	1	32605	2	1	****	E	
OCT 25,83	OCT 24,83	900	900	****	****	1	2.9	1	32606	2	1	74	C	
NOV 14,83	NOV 4,83	900	900	****	****	3	1.3	2	32607	2	1	23		NY10
NOV 22,83	NOV 19,83	900	900	****	****	2	****	1	32608	2	1	****	CD	Y3
NOV 24,83	NOV 23,83	900	900	****	****	2	28.0	2	32611	2	1	31	D	NCM
NOV 29,83	NOV 28,83	900	900	****	****	2	13.8	2	32612	2	1	4	C	N
DEC 1,83	NOV 30,83	900	900	****	****	2	1.4	2	32613	2	1	****	E	
DEC 12,83	DEC 10,83	900	900	****	****	2	17.9	2	32614	2	1	47	D	NY2
DEC 14,83	DEC 13,83	900	900	****	****	2	2.7	2	32615	2	1	85	CD	
DEC 15,83	DEC 14,83	900	900	****	****	2	1.8	2	32616	2	1	35	C	N

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LAC LA CROIX/DAILY/AEROCHEM #15

REMOVAL DATE	EXPOSURE DATE	VOLUME ML		CONDUCT. UMHO/CM		PH FIELD		PH LAB		TOTAL H+ TO PH8.3 MG/L		SULPHATE MG/L		NITRATE AS N MG/L	
AUG 19,83	AUG 18,83	172.0		21.0		******		4.70		0.0518		2.40		0.61	
AUG 24,83	AUG 23,83	2808.0		5.6		******		5.40		0.0270		0.50		0.11	
SEP 9,83	SEP 8,83	2203.0		5.1		******	G	6.42		0.0170		0.60		0.11	
SEP 10,83	SEP 9,83	522.0		3.4		******		5.38		0.0228		0.10	<W	0.01	
SEP 13,83	SEP 12,83	77.0		******		******		4.76		0.0368		0.85	<W	0.01	
SEP 16,83	SEP 15,83	582.0	D	16.6		******	D	4.55		0.0524	D	1.90		0.25	
SEP 20,83	SEP 19,83	653.0		11.4		******		4.68		0.0402		1.05		0.10	
OCT 5,83	OCT 4,83	370.0		9.6		******		4.93		0.0324		0.85		0.16	
OCT 6,83	OCT 5,83	372.0		5.0		******		5.52		0.0208		0.60	<T	0.01	
OCT 7,83	OCT 6,83	122.0		4.3		******	G	6.37		0.0128		0.15		0.09	
OCT 8,83	OCT 7,83	1207.0		10.0		******		4.84		0.0356		0.90		0.11	
OCT 13,83	OCT 12,83	446.0		4.4		******		5.37		0.0208		0.30	<T	0.02	
OCT 16,83	OCT 15,83	748.0		10.5		******		4.86		0.0322		0.90		0.22	
OCT 19,83	OCT 18,83	******		******		******		******		******		******		******	
OCT 24,83	OCT 23,83	******		******		******		******		******		******		******	
OCT 25,83	OCT 24,83	138.0		11.6		******		4.96		0.0302		1.20		0.29	
NOV 14,83	NOV 4,83	20.0		******		******		******		******		******		******	
NOV 22,83	NOV 19,83	2233.0		10.5		******		4.70		0.0344		0.75		0.12	
NOV 24,83	NOV 23,83	572.0		2.8		******		5.51		0.0176	<T	0.05	<T	0.01	
NOV 29,83	NOV 28,83	44.0		******		******		******		******		******		******	
DEC 1,83	NOV 30,83	******		******		******		******		******		******		******	
DEC 12,83	DEC 10,83	546.0		10.0		******		4.73		0.0344		0.55		0.16	
DEC 14,83	DEC 13,83	148.0		6.2		******		5.06		0.0246		0.25		0.13	
DEC 15,83	DEC 14,83	41.0		******		******		******		******		******		******	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LAC LA CROIX/DAILY/AEROCHEM #15 PAGE : 6

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
AUG 19,83	AUG 18,83	0.38	0.09	0.050	0.045	0.030	0.680	0.0200
AUG 24,83	AUG 23,83	0.10	0.03	0.010	0.055	0.070	0.166	0.0040
SEP 9,83	SEP 8,83	0.27	<W 0.01	0.050	0.035	0.040	0.314	G 0.0004
SEP 10,83	SEP 9,83	0.06	<W 0.01	0.010	0.015	<W 0.005	0.108	0.0042
SEP 13,83	SEP 12,83	0.07	<W 0.01	0.010	0.025	0.025	0.010	0.0174
SEP 16,83	SEP 15,83	D 0.18	D 0.02	0.020	0.030	<T 0.010	0.278	D 0.0282
SEP 20,83	SEP 19,83	<T 0.02	0.02	0.005	0.015	<T 0.010	0.168	0.0209
OCT 5,83	OCT 4,83	0.05	<W 0.01	0.010	0.035	0.025	0.240	0.0117
OCT 6,83	OCT 5,83	0.03	<W 0.01	0.015	0.020	0.015	0.158	0.0030
OCT 7,83	OCT 6,83	0.05	0.04	0.010	0.025	0.040	0.066	G 0.0004
OCT 8,83	OCT 7,83	0.04	0.05	0.010	0.030	0.020	0.118	0.0145
OCT 13,83	OCT 12,83	<T 0.02	0.10	<T 0.005	<T 0.005	0.015	0.014	0.0043
OCT 16,83	OCT 15,83	0.03	<T 0.01	0.005	<T 0.010	<T 0.010	D 0.270	0.0138
OCT 19,83	OCT 18,83	******	******	******	******	******	******	******
OCT 24,83	OCT 23,83	******	******	******	******	******	******	******
OCT 25,83	OCT 24,83	0.07	0.06	0.010	0.060	0.045	0.430	0.0110
NOV 14,83	NOV 4,83	******	******	******	******	******	******	******
NOV 22,83	NOV 19,83	0.05	0.02	0.005	<T 0.005	0.020	0.030	0.0200
NOV 24,83	NOV 23,83	<T 0.02	<T 0.01	<T 0.005	<T 0.005	<T 0.010	<T 0.002	0.0031
NOV 29,83	NOV 28,83	******	******	******	******	******	******	******
DEC 1,83	NOV 30,83	******	******	******	******	******	******	******
DEC 12,83	DEC 10,83	<T 0.02	0.02	<T 0.005	<W 0.005	<T 0.010	0.036	0.0186
DEC 14,83	DEC 13,83	******	0.04	******	******	******	******	0.0087
DEC 15,83	DEC 14,83	******	******	******	******	******	******	******

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : QUETICO CENTRE/DAILY/AEROCHEM #14 PAGE : 1

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES		SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
FEB 21,83	FEB 20,83	800	****	800	700	2	12.1	2	33143	2	1		****	FEI	
FEB 28,83	FEB 27,83	800	****	1400	1000	2	7.1	2	33144	2	1		****	FIE	
MAR 2,83	MAR 1,83	1000	1000	****	900	2	1.3	2	33145	2	1		****	EFI	
MAR 3,83	MAR 2,83	1000	1000	1200	1600	2	0.7	2	33146	2	1		****	EFI	
MAR 5,83	MAR 4,83	1000	1000	1000	1800	2	****	2	33147	2	1		****	D	
MAR 14,83	MAR 13,83	1000	1000	2100	1000	2	1.6	2	33149	2	1		57	D	
MAR 18,83	MAR 17,83	800	800	1300	2100	2	2.3	2	33150	2	1		26	C	N
MAR 30,83	MAR 29,83	1000	1000	****	1000	2	0.7	2	33151	2	1		****	K	
APR 1,83	MAR 31,83	800	1400	1200	1400	3	4.1	2	33152	2	1		****	K	
APR 11,83	APR 10,83	800	1000	900	1400	1	3.5	2	33153	2	1		****	E	
APR 13,83	APR 12,83	800	800	600	800	2	0.2	2	33154	2	1		****	EK	
APR 14,83	APR 13,83	800	800	800	800	2	6.3	2	33156	2	1		****	EK	
APR 15,83	APR 14,83	800	800	800	****	3	16.3	2	33155	2	1		23	CD	N
APR 27,83	APR 26,83	800	800	1330	1600	1	3.4	2	33157	2	1		121	D	N
APR 29,83	APR 28,83	800	800	1200	1900	3	6.6	2	33158	2	1		100	CD	H
MAY 4,83	MAY 3,83	800	800	****	****	3	4.4	2	33159	2	1		119	CD	H
MAY 13,83	MAY 12,83	800	800	1600	****	1	4.5	1	33162	2	1		99	CD	
MAY 18,83	MAY 17,83	800	800	2000	****	1	2.6	1	33163	2	1		91	CD	HCM
MAY 20,83	MAY 19,83	800	800	1100	800	1	0.7	1	33164	2	1	U	439	CDP	NHM
MAY 21,83	MAY 20,83	800	800	700	800	1	0.3	2	33160	2	1		****	EK	
MAY 22,83	MAY 21,83	800	800	800	900	1	0.1	2	33161	2	1		****	EK	
MAY 24,83	MAY 23,83	800	800	****	700	1	2.4	1	33165	2	1		89		HM
MAY 29,83	MAY 28,83	800	800	800	2000	1	25.2	1	33166	2	1		100	D	H
MAY 30,83	MAY 29,83	800	800	****	****	1	0.4	1	33167	2	1		****	EK	
JUN 3,83	JUN 2,83	800	800	1700	1800	1	0.5	1	33168	2	1		****	EK	
JUN 4,83	JUN 3,83	800	800	1500	2000	1	19.8	1	33169	2	1		100	D	
JUN 5,83	JUN 4,83	800	800	****	****	1	0.8	1	33170	2	1		****	EK	
JUN 9,83	JUN 8,83	800	800	1400	1600	1	2.0	1	33171	2	1		85	D	
JUN 13,83	JUN 12,83	800	900	2200	****	1	6.5	1	33172	2	1		103	D	
JUN 15,83	JUN 14,83	800	800	1200	2100	1	13.2	1	33173	2	1		102	D	
JUN 16,83	JUN 15,83	800	800	1400	800	1	14.6	1	33174	2	1		102	D	HM
JUN 17,83	JUN 16,83	800	800	1200	****	1	1.2	1	33175	2	1		****	EK	
JUN 22,83	JUN 21,83	800	800	****	700	1	50.0	1	33176	2	1	U	0	EG	
JUN 25,83	JUN 24,83	800	600	****	****	1	18.0	1	33177	2	1		34	BD	N
JUN 26,83	JUN 25,83	800	800	1200	1400	1	12.0	1	33178	2	1		45	D	N
JUN 27,83	JUN 26,83	800	800	1400	1630	1	3.2	1	33179	2	1	U	464	DP	N
JUN 30,83	JUN 29,83	800	800	****	****	1	8.4	1	33180	2	1		91	D	
JUL 1,83	JUN 30,83	800	800	****	****	1	4.5	1	33181	2	1		98	D	C
JUL 4,83	JUL 1,83	800	800	****	****	1	33.0	1	33182	2	1		96	CD	Y3
JUL 5,83	JUL 4,83	800	800	830	1200	1	6.0	1	33183	2	1		85	D	HM

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : QUETICO CENTRE/DAILY/AEROCHEM #14

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
FEB 21,83	FEB 20,83	******	******	******	******	******	******	******
FEB 28,83	FEB 27,83	******	******	******	******	******	******	******
MAR 2,83	MAR 1,83	******	******	******	******	******	******	******
MAR 3,83	MAR 2,83	******	******	******	******	******	******	******
MAR 5,83	MAR 4,83	156.0	30.0	******	U 6.27	0.0276	5.40	0.87
MAR 14,83	MAR 13,83	59.0	******	******	U 7.01	0.0214	1.30	0.21
MAR 18,83	MAR 17,83	39.0	******	******	5.66	0.0162	0.15	<W 0.01
MAR 30,83	MAR 29,83	******	******	******	******	******	******	******
APR 1,83	MAR 31,83	******	******	******	******	******	******	******
APR 11,83	APR 10,83	******	******	******	******	******	******	******
APR 13,83	APR 12,83	******	******	******	******	******	******	******
APR 14,83	APR 13,83	******	******	******	******	******	******	******
APR 15,83	APR 14,83	241.0	13.7	******	4.59	0.0502	1.05	0.13
APR 27,83	APR 26,83	264.0	12.3	******	U 6.78	0.0248	1.80	0.28
APR 29,83	APR 28,83	424.0	7.9	******	5.59	0.0238	1.25	0.17
MAY 4,83	MAY 3,83	338.0	6.6	******	5.76	0.0200	1.20	0.07
MAY 13,83	MAY 12,83	288.0	23.4	******	4.42	0.0626	2.20	0.22
MAY 18,83	MAY 17,83	153.0	11.8	******	G 6.32	0.0218	1.60	0.41
MAY 20,83	MAY 19,83	197.0	8.6	******	5.61	0.0224	1.05	0.14
MAY 21,83	MAY 20,83	******	******	******	******	******	******	******
MAY 22,83	MAY 21,83	******	******	******	******	******	******	******
MAY 24,83	MAY 23,83	138.0	******	******	U 6.91	0.0206	1.10	0.34
MAY 29,83	MAY 28,83	1621.0	6.6	******	5.30	0.0238	0.80	0.13
MAY 30,83	MAY 29,83	******	******	******	******	******	******	******
JUN 3,83	JUN 2,83	******	******	******	******	******	******	******
JUN 4,83	JUN 3,83	1281.0	5.8	******	5.18	0.0234	0.55	0.09
JUN 5,83	JUN 4,83	******	******	******	******	******	******	******
JUN 9,83	JUN 8,83	110.0	******	******	G 6.78	0.0182	1.60	0.22
JUN 13,83	JUN 12,83	433.0	11.7	******	5.05	0.0316	1.65	0.21
JUN 15,83	JUN 14,83	869.0	12.1	******	4.80	0.0346	1.45	0.14
JUN 16,83	JUN 15,83	956.0	3.8	******	5.46	0.0178	0.30	0.08
JUN 17,83	JUN 16,83	******	******	******	******	******	******	******
JUN 22,83	JUN 21,83	5.0	******	******	******	******	******	******
JUN 25,83	JUN 24,83	398.0	18.0	******	4.73	0.0436	2.65	0.25
JUN 26,83	JUN 25,83	347.0	18.3	******	4.67	0.0470	2.70	0.25
JUN 27,83	JUN 26,83	953.0	18.0	******	4.66	0.0452	2.65	0.25
JUN 30,83	JUN 29,83	495.0	14.6	******	4.53	0.0454	1.30	0.16
JUL 1,83	JUN 30,83	284.0	3.3	******	5.44	0.0178	0.25	0.03
JUL 4,83	JUL 1,83	2036.0	6.6	******	5.02	0.0260	0.40	0.14
JUL 5,83	JUL 4,83	327.0	2.1	******	5.60	0.0170	<W 0.05	<T 0.02

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : QUETICO CENTRE/DAILY/AEROCHEM #14 PAGE : 3

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
FEB 21,83	FEB 20,83	******	******	******	******	******	******	******
FEB 28,83	FEB 27,83	******	******	******	******	******	******	******
MAR 2,83	MAR 1,83	******	******	******	******	******	******	******
MAR 3,83	MAR 2,83	******	******	******	******	******	******	******
MAR 5,83	MAR 4,83	U 1.98	U 0.45	U 0.120	U 0.225	U 0.310	1.090	U 0.0005
MAR 14,83	MAR 13,83	******	U 0.45	******	******	******	0.066	U 0.0001
MAR 18,83	MAR 17,83	******	0.05	******	******	******	******	0.0022
MAR 30,83	MAR 29,83	******	******	******	******	******	******	******
APR 1,83	MAR 31,83	******	******	******	******	******	******	******
APR 11,83	APR 10,83	******	******	******	******	******	******	******
APR 13,83	APR 12,83	******	******	******	******	******	******	******
APR 14,83	APR 13,83	******	******	******	******	******	******	******
APR 15,83	APR 14,83	0.09	0.02	0.010	0.030	0.025	0.028	0.0257
APR 27,83	APR 26,83	U 0.67	0.03	0.055	0.050	0.060	0.750	U 0.0002
APR 29,83	APR 28,83	0.15	<T 0.01	0.025	0.030	0.015	0.430	0.0026
MAY 4,83	MAY 3,83	0.19	0.01	0.035	0.040	0.020	0.338	0.0017
MAY 13,83	MAY 12,83	0.26	0.04	0.050	0.035	0.040	0.148	0.0380
MAY 18,83	MAY 17,83	0.33	0.04	0.070	0.060	0.030	0.232	G 0.0005
MAY 20,83	MAY 19,83	0.18	0.10	0.035	0.100	0.065	0.670	0.0025
MAY 21,83	MAY 20,83	******	******	******	******	******	******	******
MAY 22,83	MAY 21,83	******	******	******	******	******	******	******
MAY 24,83	MAY 23,83	0.44	U 0.40	0.085	U 0.490	U 0.265	0.068	U 0.0001
MAY 29,83	MAY 28,83	D 0.24	0.03	0.060	0.045	0.045	0.156	0.0050
MAY 30,83	MAY 29,83	******	******	******	******	******	******	******
JUN 3,83	JUN 2,83	******	******	******	******	******	******	******
JUN 4,83	JUN 3,83	******	0.03	******	******	******	0.134	0.0066
JUN 5,83	JUN 4,83	******	******	******	******	******	******	******
JUN 9,83	JUN 8,83	******	0.34	******	******	******	0.350	G 0.0002
JUN 13,83	JUN 12,83	0.20	0.08	0.035	0.100	0.045	0.420	0.0089
JUN 15,83	JUN 14,83	0.08	0.14	0.015	0.045	0.035	0.216	0.0158
JUN 16,83	JUN 15,83	0.05	0.12	0.010	0.055	<T 0.010	0.050	0.0035
JUN 17,83	JUN 16,83	******	******	******	******	******	******	******
JUN 22,83	JUN 21,83	******	******	******	******	******	******	******
JUN 25,83	JUN 24,83	0.25	0.07	0.030	0.045	0.040	0.540	0.0186
JUN 26,83	JUN 25,83	0.25	0.07	0.030	0.035	0.020	0.540	0.0214
JUN 27,83	JUN 26,83	0.26	0.07	0.030	0.030	0.020	0.540	0.0219
JUN 30,83	JUN 29,83	0.07	<W 0.01	0.010	0.020	0.015	0.124	0.0295
JUL 1,83	JUN 30,83	0.04	<W 0.01	0.005	0.030	0.015	0.052	0.0036
JUL 4,83	JUL 1,83	0.08	<W 0.01	0.010	0.025	<T 0.010	0.114	0.0095
JUL 5,83	JUL 4,83	0.06	<W 0.01	0.010	0.135	0.040	0.010	0.0025

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : QUETICO CENTRE/DAILY/AEROCHEM #14 PAGE : 4

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
JUL 17,83	JUL 16,83	800	800	1100	1500	1	30.3	1	33185	2	1	101		
JUL 19,83	JUL 18,83	800	800	2100	****	1	12.0	1	33184	2	1	95		
JUL 24,83	JUL 23,83	800	800	1100	****	1	2.0	1	33186	2	1	30	C	N
JUL 28,83	JUL 27,83	800	800	1700	1800	1	17.0	1	33187	2	1	105	D	
JUL 31,83	JUL 30,83	800	800	600	****	1	25.0	1	33188	2	1	101	D	C
AUG 1,83	JUL 31,83	800	800	****	****	1	1.0	1	33189	2	1	****	E	
AUG 3,83	AUG 2,83	800	800	1700	2200	1	13.0	1	33190	2	1	97	CD	
AUG 8,83	AUG 7,83	800	800	2000	2200	1	7.0	1	33191	2	1	88	CD	
AUG 10,83	AUG 9,83	800	1000	600	****	1	7.2	1	33192	2	1	89	CD	C
AUG 11,83	AUG 10,83	1000	800	1000	1500	1	14.8	1	33193	2	1	96	CD	HCM
AUG 19,83	AUG 18,83	800	800	2100	300	1	2.8	1	33194	2	1	95	CD	
AUG 22,83	AUG 21,83	800	800	1100	2200	1	11.0	1	33195	2	1	76	CD	H
AUG 24,83	AUG 23,83	800	800	2100	****	1	5.6	1	33196	2	1	90	CD	C
AUG 28,83	AUG 27,83	800	800	1900	2300	1	24.2	1	33197	2	1	102	CD	C
AUG 30,83	AUG 29,83	800	800	1100	1400	1	6.2	1	33198	2	1	89	CD	H
SEP 2,83	SEP 1,83	800	800	2000	2100	1	0.4	1	33199	2	1	****	E	
SEP 9,83	SEP 8,83	800	800	2300	100	1	32.1	1	33200	2	1	100	D	
SEP 10,83	SEP 9,83	800	800	700	800	1	16.2	1	33201	2	1	97		HCM
SEP 13,83	SEP 12,83	800	800	1600	2000	1	0.5	1	33202	2	1	****	E	
SEP 16,83	SEP 15,83	800	1000	1600	****	1	6.2	1	33203	2	1	54	C	M
SEP 18,83	SEP 17,83	1900	2200	****	****	1	6.8	1	33204	2	1	56	C	
SEP 21,83	SEP 20,83	800	800	1200	****	1	7.4	1	33205	2	1	78	C	CM
SEP 22,83	SEP 21,83	800	800	****	****	1	0.4	1	33206	2	1	****	E	
SEP 29,83	SEP 28,83	800	800	1600	****	1	6.0	1	33207	2	1	71	CD	
SEP 30,83	SEP 29,83	800	800	****	800	1	7.0	1	33209	2	1	80	D	HM
OCT 1,83	SEP 30,83	800	800	1000	800	1	25.3	1	33210	2	1	102	C	
OCT 3,83	OCT 2,83	800	800	1200	800	1	10.8	1	33211	2	1	95	C	C
OCT 5,83	OCT 4,83	830	830	1200	****	1	4.8	1	33212	2	1	83	C	
OCT 6,83	OCT 5,83	830	800	1200	1630	1	2.2	1	33213	2	1	70	C	
OCT 8,83	OCT 7,83	900	900	900	1500	1	3.1	1	33214	2	1	64	C	H
OCT 11,83	OCT 8,83	900	800	1200	800	1	16.6	1	33215	2	1	40	C	NY3
OCT 12,83	OCT 11,83	800	800	800	1000	1	0.5	1	33217	2	1	****	E	
OCT 13,83	OCT 12,83	800	800	1200	1700	3	16.2	1	33218	2	1	71	CD	HM
OCT 14,83	OCT 13,83	800	800	1100	1500	3	4.2	1	33219	2	1	79	C	
OCT 17,83	OCT 14,83	800	800	1100	1600	1	11.6	1	33220	2	1	77	ACD	HMY3
OCT 25,83	OCT 24,83	800	800	1000	1500	1	4.6	1	33222	2	1	74		HM
NOV 14,83	NOV 13,83	800	800	1000	800	2	1.2	2	33224	2	1	****		
NOV 16,83	NOV 15,83	800	1000	****	****	1	0.1	1	33223	2	1	****	E	
NOV 21,83	NOV 20,83	800	900	1600	900	3	32.4	2	33225	2	1	64	D	
NOV 22,83	NOV 21,83	900	900	900	930	2	1.0	2	33226	2	1	****	K	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : QUETICO CENTRE/DAILY/AEROCHEM #14

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD		PH LAB	TOTAL H+ TO PH8.3 MG/L		SULPHATE MG/L		NITRATE AS N MG/L
JUL 17,83	JUL 16,83	1969.0	10.8	******		4.97	0.0316		1.35		0.19
JUL 19,83	JUL 18,83	735.0	8.3	******		4.92	0.0314		0.35		0.19
JUL 24,83	JUL 23,83	39.0	******	******	G	6.05	0.0190		0.25		0.02
JUL 28,83	JUL 27,83	1149.0	9.0	******		4.96	0.0278		1.00		0.12
JUL 31,83	JUL 30,83	1624.0	4.4	******		5.31	0.0208		0.30		0.06
AUG 1,83	JUL 31,83	******	******	******		******	******		******		******
AUG 3,83	AUG 2,83	810.0	11.5	******		4.84	0.0326		1.25		0.17
AUG 8,83	AUG 7,83	398.0	8.7	******	G	6.96	0.0172		0.80		0.25
AUG 10,83	AUG 9,83	413.0	4.9	******		5.26	0.0228		0.40		0.03
AUG 11,83	AUG 10,83	920.0	5.2	******		5.22	0.0242		0.25		0.04
AUG 19,83	AUG 18,83	172.0	11.5	******		5.00	0.0324		1.05		0.33
AUG 22,83	AUG 21,83	537.0	8.3	******		5.18	0.0272		0.70		0.18
AUG 24,83	AUG 23,83	326.0	4.2	******		5.32	0.0256		0.25		0.07
AUG 28,83	AUG 27,83	1586.0	3.4	******		5.72	0.0212		0.30		0.05
AUG 30,83	AUG 29,83	357.0	6.0	******		5.88	0.0214		0.65		0.16
SEP 2,83	SEP 1,83	******	******	******		******	******		******		******
SEP 9,83	SEP 8,83	2061.0	6.8	******	G	6.34	0.0198		1.10		0.18
SEP 10,83	SEP 9,83	1011.0	2.8	******		5.49	0.0200	<W	0.05	<W	0.01
SEP 13,83	SEP 12,83	******	******	******		******	******		******		******
SEP 16,83	SEP 15,83	216.0	10.4	******		4.72	0.0392		0.90		0.04
SEP 18,83	SEP 17,83	247.0	14.0	******		4.64	0.0434		1.20		0.25
SEP 21,83	SEP 20,83	372.0	1.5	******		6.08	0.0168	<W	0.05	<W	0.01
SEP 22,83	SEP 21,83	******	******	******		******	******		******		******
SEP 29,83	SEP 28,83	274.0	23.5	******		4.65	0.0516		3.45		0.42
SEP 30,83	SEP 29,83	360.0	7.3	******		5.06	0.0282		0.90		0.40
OCT 1,83	SEP 30,83	1659.0	15.4	******		4.89	0.0336		2.20		0.31
OCT 3,83	OCT 2,83	663.0	4.5	******		5.33	0.0230		0.30		0.07
OCT 5,83	OCT 4,83	257.0	8.2	******		5.07	0.0270		0.80		0.13
OCT 6,83	OCT 5,83	100.0	8.5	******		5.18	0.0278		1.00		0.15
OCT 8,83	OCT 7,83	128.0	6.3	******	U	6.51	0.0166		0.55		0.14
OCT 11,83	OCT 8,83	427.0	11.0	******		4.76	0.0372		1.15		0.14
OCT 12,83	OCT 11,83	******	******	******		******	******		******		******
OCT 13,83	OCT 12,83	745.0	4.3	******		5.18	0.0230		0.30		0.04
OCT 14,83	OCT 13,83	215.0	6.4	******	D	4.95	0.0284		0.40		0.12
OCT 17,83	OCT 14,83	578.0	12.5	******		4.79	0.0350		1.15		0.23
OCT 25,83	OCT 24,83	219.0	9.4	******		4.99	0.0244		1.00		0.20
NOV 14,83	NOV 13,83	******	******	******		******	******		******		******
NOV 16,83	NOV 15,83	******	******	******		******	******		******		******
NOV 21,83	NOV 20,83	1349.0	16.5	******		4.56	0.0452		1.35		0.22
NOV 22,83	NOV 21,83	******	******	******		******	******		******		******

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : QUETICO CENTRE/DAILY/AEROCHEM #14 PAGE : 6

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
JUL 17,83	JUL 16,83	0.25	0.06	0.015	0.030	0.015	0.240	0.0107
JUL 19,83	JUL 18,83	0.05	0.04	<W 0.005	0.020	<T 0.010	0.060	0.0120
JUL 24,83	JUL 23,83	******	0.11	******	******	******	******	G 0.0009
JUL 28,83	JUL 27,83	<T 0.01	<W 0.01	0.010	0.105	0.050	0.264	0.0110
JUL 31,83	JUL 30,83	<T 0.01	<W 0.01	0.010	0.025	0.010	0.052	0.0049
AUG 1,83	JUL 31,83	******	******	******	******	******	******	******
AUG 3,83	AUG 2,83	0.08	0.02	0.015	0.035	0.010	0.308	0.0145
AUG 8,83	AUG 7,83	0.64	0.03	0.150	0.095	0.030	0.334	G 0.0001
AUG 10,83	AUG 9,83	0.06	0.04	<W 0.005	<W 0.005	<W 0.005	0.082	0.0055
AUG 11,83	AUG 10,83	0.05	<W 0.01	<W 0.005	<T 0.010	<W 0.005	0.062	0.0060
AUG 19,83	AUG 18,83	0.38	0.06	0.060	0.050	0.035	0.204	0.0100
AUG 22,83	AUG 21,83	0.18	0.05	0.020	0.020	0.025	0.212	0.0066
AUG 24,83	AUG 23,83	0.06	0.02	<W 0.005	<T 0.010	<W 0.005	0.064	0.0048
AUG 28,83	AUG 27,83	0.10	0.02	0.015	<W 0.005	0.030	0.106	0.0019
AUG 30,83	AUG 29,83	0.13	0.04	0.025	0.045	0.030	0.330	0.0013
SEP 2,83	SEP 1,83	******	******	******	******	******	******	******
SEP 9,83	SEP 8,83	0.38	0.04	0.055	0.050	0.055	0.340	G 0.0005
SEP 10,83	SEP 9,83	0.06	<W 0.01	0.005	0.025	0.015	0.090	0.0032
SEP 13,83	SEP 12,83	******	******	******	******	******	******	******
SEP 16,83	SEP 15,83	0.05	<W 0.01	0.010	0.015	<W 0.005	0.112	0.0191
SEP 18,83	SEP 17,83	0.18	0.02	0.015	0.045	0.030	0.178	0.0229
SEP 21,83	SEP 20,83	0.04	0.04	<W 0.005	0.045	<T 0.010	0.078	0.0008
SEP 22,83	SEP 21,83	******	******	******	******	******	******	******
SEP 29,83	SEP 28,83	0.42	0.16	0.060	0.060	U 0.180	0.750	0.0224
SEP 30,83	SEP 29,83	<T 0.02	<W 0.01	<T 0.005	<T 0.010	0.015	0.158	0.0087
OCT 1,83	SEP 30,83	0.42	0.15	0.070	0.050	0.120	0.400	0.0129
OCT 3,83	OCT 2,83	0.03	<W 0.01	0.005	0.020	0.010	0.068	0.0047
OCT 5,83	OCT 4,83	0.05	0.12	0.010	0.060	D 0.110	0.176	0.0085
OCT 6,83	OCT 5,83	0.11	0.02	0.015	0.035	0.135	0.210	0.0066
OCT 8,83	OCT 7,83	0.13	U 0.50	U 0.015	U 0.430	U 0.325	0.130	U 0.0003
OCT 11,83	OCT 8,83	0.04	<W 0.01	0.005	0.020	0.020	0.138	0.0174
OCT 12,83	OCT 11,83	******	******	******	******	******	******	******
OCT 13,83	OCT 12,83	<T 0.02	<W 0.01	<T 0.005	<T 0.005	0.020	0.138	0.0066
OCT 14,83	OCT 13,83	0.04	<W 0.01	0.005	<W 0.005	0.030	0.006	D 0.0112
OCT 17,83	OCT 14,83	0.08	<W 0.01	0.005	0.025	0.020	0.010	0.0162
OCT 25,83	OCT 24,83	0.07	0.06	0.005	<T 0.015	0.020	0.032	0.0102
NOV 14,83	NOV 13,83	******	******	******	******	******	******	******
NOV 16,83	NOV 15,83	******	******	******	******	******	******	******
NOV 21,83	NOV 20,83	0.07	0.05	0.005	<T 0.010	0.020	0.062	0.0275
NOV 22,83	NOV 21,83	******	******	******	******	******	******	******

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : QUETICO CENTRE/DAILY/AEROCHEM #14 PAGE : 7

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
NOV 23,83	NOV 22,83	900	900	1600	900	2	3.0	2	33227	2	1	****	K	
NOV 24,83	NOV 23,83	900	900	900	800	2	62.2	2	33229	2	1	35	C	NHCM
NOV 25,83	NOV 24,83	900	800	2000	****	2	1.0	2	33231	2	1	****	K	
NOV 29,83	NOV 28,83	800	800	1200	****	2	9.8	2	33233	2	1	42		NHCM
NOV 30,83	NOV 29,83	800	900	1400	2000	2	1.8	2	33234	2	1	****	K	
DEC 2,83	DEC 1,83	900	900	1200	1530	2	1.2	2	33235	2	1	****	K	
DEC 5,83	DEC 2,83	900	900	1300	1500	2	0.3	2	33236	2	1	****	E	Y3
DEC 8,83	DEC 5,83	900	900	****	****	2	0.5	2	33237	2	1	****	K	Y3
DEC 12,83	DEC 11,83	900	900	****	1300	2	10.4	2	33238	2	1	50	C	HCM
DEC 14,83	DEC 13,83	900	900	1000	1500	2	3.2	2	33239	2	1	****	KE	
DEC 21,83	DEC 20,83	900	900	****	900	2	3.0	2	33240	2	1	****	KE	
DEC 22,83	DEC 21,83	900	900	900	1100	2	0.8	2	33241	2	1	****	E	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : QUETICO CENTRE/DAILY/AEROCHEM #14

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD		PH LAB	TOTAL H+ TO PH8.3 MG/L		SULPHATE MG/L		NITRATE AS N MG/L
NOV 23,83	NOV 22,83	******	******	******		******	******		******		******
NOV 24,83	NOV 23,83	1407.0	3.0	******	G	5.84	0.0164	<T	0.10	<T	0.02
NOV 25,83	NOV 24,83	******	******	******		******	******		******		******
NOV 29,83	NOV 28,83	270.0	2.3	******	G	5.82	0.0168	<T	0.10	<W	0.01
NOV 30,83	NOV 29,83	******	******	******		******	******		******		******
DEC 2,83	DEC 1,83	******	******	******		******	******		******		******
DEC 5,83	DEC 2,83	******	******	******		******	******		******		******
DEC 8,83	DEC 5,83	******	******	******		******	******		******		******
DEC 12,83	DEC 11,83	339.0	3.0	******	U	6.05	0.0152	<T	0.10	<T	0.02
DEC 14,83	DEC 13,83	******	******	******		******	******		******		******
DEC 21,83	DEC 20,83	******	******	******		******	******		******		******
DEC 22,83	DEC 21,83	******	******	******		******	******		******		******

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : QUETICO CENTRE/DAILY/AEROCHEM #14 PAGE : 9

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
NOV 23,83	NOV 22,83	******	******	******	******	******	******	******
NOV 24,83	NOV 23,83	<T 0.02	0.03	<W 0.005	<T 0.005	<T 0.005	<T 0.002	G 0.0014
NOV 25,83	NOV 24,83	******	******	******	******	******	******	******
NOV 29,83	NOV 28,83	<T 0.02	0.03	<W 0.005	<T 0.005	<T 0.005	<W 0.002	G 0.0015
NOV 30,83	NOV 29,83	******	******	******	******	******	******	******
DEC 2,83	DEC 1,83	******	******	******	******	******	******	******
DEC 5,83	DEC 2,83	******	******	******	******	******	******	******
DEC 8,83	DEC 5,83	******	******	******	******	******	******	******
DEC 12,83	DEC 11,83	0.03	<T 0.02	<W 0.005	<W 0.005	<W 0.005	<W 0.002	U 0.0009
DEC 14,83	DEC 13,83	******	******	******	******	******	******	******
DEC 21,83	DEC 20,83	******	******	******	******	******	******	******
DEC 22,83	DEC 21,83	******	******	******	******	******	******	******